Design of Behavioral Health Crisis Units

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This paper is intended to (1) describe the need for dedicated facilities in which emergency services are rendered to stabilize behavioral and mental health patients in crisis, (2) provide design guidance for the creation of such a healing space beyond the minimum requirements in the 2022 FGI *Guidelines for Design and Construction* documents for hospitals and outpatient facilities, and (3) be a resource for a range of stakeholders in the design, construction, regulation, and operation of a behavioral health crisis unit.

About the Facility Guidelines Institute

The Facility Guidelines Institute (FGI) is a not-for-profit corporation founded in 1998 to provide leadership and continuity to the revision process for the *Guidelines for Design and Construction* series of documents. FGI functions as the coordinating entity for development of the *Guidelines* documents using an interdisciplinary, consensus-based process and for provision of ancillary services that encourage and improve their application and use. FGI invests revenue from sales of the *Guidelines* documents to fund the activities of the next revision cycle as well as research that can inform the *Guidelines* development process.

FGI seeks to gather perspectives on challenges facing patients and clinicians in clinical spaces with the intent of gleaning ideas for research and supporting efforts to keep FGI's *Guidelines for Design and Construction* documents current with operations in the field. The process of collecting this information also provides an avenue to explore the implications of current *Guidelines* requirements and to assess the need for potential changes in future editions.

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Information and recommendations in this publication are not intended to be used as baseline requirements, nor are they intended to be adopted as code and enforced by an authority having jurisdiction. Rather, these publications are intended to provide supplemental information for individuals or organizations that choose to exceed the baseline design requirements in the FGI *Guidelines* documents to meet client and/or community needs.

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As the patient census has risen in emergency departments (EDs) across the United States, many EDs have seen a parallel increase in the number of behavioral and mental health patients seeking care. However, the overall growth in emergency medicine as a service line is just one reason for this rise in behavioral health patient volumes.

Other factors contributing to the growth in behavioral and mental health patients coming to EDs include an insufficiency of inpatient beds for behavioral and mental health treatment, the limits of community-based programs supporting deinstitutionalized care, an increased need for pediatric and adolescent psychiatric services in the ED, and a rise in geriatric psychiatric services tied to the aging U.S. population. Further, there has been a growing recognition that psychiatric emergencies, like all medical emergencies, are frequently too acute and high risk to be handled in subacute community settings and require hospital emergency-level interventions.

These many issues have led to a burgeoning demand for prompt, appropriate, and effective behavioral health services in the emergency department. The resulting increase in the behavioral health patient census, however, frequently results in prolonged lengths of stay in the ED for these patients, often in spaces inappropriate for their care.

Care settings for behavioral health treatment in the ED should support the safety and welfare of patients and staff. To achieve this, these spaces must be protected from the inherent risks and stress factors that exist in the emergency department at large. Provision of a tailored environment for behavioral health care that accommodates a range of behavioral health diagnoses and the various age cohorts seen in this patient census improves outcomes for behavioral health patients and improves the patient experience for other ED patients.

"At the root of this dilemma is the way we view mental health in this country. Whether an illness affects your heart, your leg or your brain, it is still an illness, and there should be no distinction."

—Michelle Obama, at the "Change Direction" Mental Health Event on March 4, 2015

Never has the need for such dedicated spaces for the treatment of behavioral health emergencies been clearer than during the COVID-19 pandemic. The results of a Centers for Disease Control and Prevention (CDC) survey in June 2020 show the incidence of self-reported behavioral health symptoms was nearly double the volumes expected by the National Institute of Mental Health before the pandemic.[1] This rise in behavioral health symptoms contributed to a "perfect storm" of clinical challenges facing emergency departments across the country. Although ED volumes dropped dramatically due to concerns over the spread of COVID-19, infectious disease cases in the ED rose to nearly four times the average,[2] overwhelming existing clinical facilities and in some instances leading to spillover into alternate care sites.

Alongside the COVID-19 surge, behavioral health visits to the ED rose for both adults and children. When compared with the same period in 2019, the 2020 figures for individuals with mental health conditions presenting in the ED with an array of diagnoses were significantly higher.[3] For children in particular, the proportion of mental health-related visits for ages 5–11 and 12–17 years increased approximately 24 percent and 31 percent, respectively.[4] The confluence of these volumes, with the distinct care environment needs of each, underscored the importance of an intentional focus on both behavioral health care in general and its place in a response to disasters and epidemics.

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[1]Joshua A. Gordon, "One Year In: COVID-19 and Mental Health," Director's Message, National Institute of Mental Health website, April 9, 2021, *https://www.nimh.nih.gov/about/director/messages/2021/one-year-in-covid-19-and-mental-health*.

[2]K. P. Hartnett, A. Kite-Powell, J. DeVies, et al., "Impact of the COVID-19 Pandemic on Emergency Department Visits—United States, January 1, 2019–May 30, 2020," *Morbidity and Mortality Weekly Report* (*MMWR*) 69, no. 23 (June 12, 2020): 699–704, *https://doi.org/10.15585/mmwr.mm6923e1*.

[3]K. M. Holland, C. Jones, A. M. Vivolo-Kantor, et al., "Trends in U.S. Emergency Department Visits for Mental Health, Overdose, and Violence Outcomes Before and During the COVID-19 Pandemic," *JAMA Psychiatry* 78, no.4 (April 2021): 372-79, *https://doi.org/10.1001/jamapsychiatry.2020.4402*.

[4]R. T. Leeb, R. H. Bitsko, L. Radhakrishnan, et al., "Mental Health-Related Emergency Department Visits Among Children Aged <18 Years During the COVID-19 Pandemic—United States, January 1–October 17, 2020," *MMWR* 69, no. 45 (Nov. 13, 2021):1675–80, *https://doi.org/10.15585/mmwr.mm6945a3*.

Recognition of the critical need for behavioral health care settings properly positioned to deliver the right care in the right place at the right time has led to a focus on creating spaces where care for those in a behavioral health crisis can be safely and effectively provided.

Why a Behavioral Health Crisis Unit?

There is good evidence that the great majority of behavioral health emergencies can be resolved within 24 hours in a dedicated behavioral health unit located in or near the ED. Provision of such dedicated units leads to more judicious use of available inpatient psychiatric beds, reduces delays in care for all emergency patients, allows for greater availability of medical ED beds, and saves money for payors by avoiding unnecessary, expensive inpatient admissions.

Presently, the default treatment applied for behavioral and mental health emergencies is too often "find an inpatient bed" rather than "initiate treatment in the emergency setting." By comparison, if every patient coming to the ED with chest pain were hospitalized, it would likely result in a national shortage of medical beds, while in reality only about 20 percent of chest pain patients are hospitalized.[5] Similarly, good emergency behavioral health programs also admit only about 20 percent of patients.[6]

Despite the general view that it is always appropriate to see a patient with chest pain in the ED, some argue that outpatient services in the community should be able to meet the needs of patients with a psychiatric emergency. However, because emergencies are unpredictable—whether cardiac or psychiatric—they require emergency evaluation and intervention. Thus, it is important to create appropriate

[5]S. G. Cafardi, J. M. Pines, P. Deb, et al., "Increased observation services in Medicare beneficiaries with chest pain," *American Journal of Emergency Medicine* 34, no. 1 (January 2016):16–19, *https://doi.org/10.1016/j.ajem.2015.08.049*.

[6]S. L. Zeller, N. M. Calma, and A. Stone, "Effect of a dedicated regional psychiatric emergency service on boarding of psychiatric patients in area emergency departments," *Western Journal of Emergency Medicine* 15, no. 1 (2014):1-6, *https://doi.org/10.5811/westjem.2013.6.17848*.

service and facility designs for behavioral and mental health emergency care in hospital emergency departments.

Benefits of a Behavioral Health Crisis Unit

Creating a separate physical environment to better address the needs of behavioral and mental health patients in crisis offers numerous benefits:

- The therapeutic setting of a behavioral health crisis unit (BHCU) supports the compassionate care from specifically trained clinical staff that mental and behavioral health patients need.
- Many patients, even high-acuity cases traditionally thought to need transfer to inpatient care, can be stabilized in a crisis unit within hours, avoiding admission to an inpatient unit and affording better allocation of scarce resources for acute behavioral and mental health emergencies.
- The increased speed in caring for all emergent patient populations, psychiatric or traditional, supported by a BHCU increases patient satisfaction and well-being and staff outlook and improves the financial viability of the emergency department.
- Despite the first costs associated with creating these units, provision of a BHCU—regardless of size—can have a positive impact on the overall life cycle cost of care provided in the emergency department.
- Provision of appropriate settings for care of behavioral and mental health patients in crisis adds to the well-being of the community overall.

Creation of a behavioral health crisis unit (BHCU) in or readily accessible to the ED allows behavioral and mental health patients to be received directly by the crisis unit or medically screened in the ED and then transferred to the BHCU. Provision of an appropriate environment of care for safe and effective interdisciplinary care of behavioral and mental health patients in an emergency department setting has many benefits, including a decrease in involuntary holds of patients, a reduction in use of intensive therapeutic resources, and improvements in both patient and staff satisfaction.

Regulation of Behavioral and Mental Health Emergency Facility Design

In response to the rising demand for emergency department-based services for behavioral and mental health patients, many states have developed their own regulations for provision of the necessary environment of care. In 1989 New York State passed legislation authorizing the Office of Mental Health to "develop a Comprehensive Psychiatric Emergency Program (CPEP) designed to provide a systematic response to psychiatric emergencies in urban areas."[7] States including Florida, Montana, and Arizona "legally recognize and license crisis stabilization units."[8]

As of February 2021, more than 100 behavioral health and psychiatric crisis units were operating at the hospital level of care, with scores more in development. Because the provisions for care of behavioral and mental health patients in the ED have been developed individually over time, the patient spaces that have resulted vary from state to state in programming, design, and construction. Although many of these facilities offer thoughtful design solutions for care of these patients, the lack of vetted and consistent standards to guide the creation of a crisis stabilization unit has been noted by providers, designers, and regulators.

Minimum Requirements for BHCUs in the FGI *Guidelines*

The 2022 edition of the Facility Guidelines Institute's *Guidelines for Design and Construction of Hospitals* and *Guidelines for Design and Construction of Outpatient Facilities* both include minimum design requirements for behavioral health care units, beginning with the

As the benefits of behavioral health crisis units are recognized, the need has increased for consistent guidance to inform the design and construction process.

[7]Annual Report, New York State Office of Mental Health, 2012.

[8]ACEP Emergency Medicine Practice Committee, "Care of the Psychiatric Patient in the Emergency Department—A 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-health-and-substance-abuse/psychiatric-patient-care-in-the-ed-2014.pdf*.

development of a functional program and safety risk assessment. These processes and the resulting documents capture the owner's intent, guide project design, support patient and staff safety, and provide standards and guidance to authorities having jurisdiction (AHJs).

The Facility Guidelines Institute (FGI) convened a topic group as part of its 2022 *Guidelines* revision cycle at the request of Virginia Pankey, AIA, LEED AP, EDAC, who had participated in a workshop sponsored by FGI and the American College of Emergency Physicians and coordinated by Mazzetti+GBA titled "Reimagining the Emergency Department." Discussed during the workshop was the universality of issues around meeting the needs of behavioral and mental health patients, regardless of geographic region and urban or rural location. A few behavioral and mental health crisis units in different parts of the country were also mentioned.

With no standards to reference, architects and health systems developing a behavioral health crisis unit had to meet with AHJs to present their case for operational differences in the clinical care model and the physical design needs of these units. These efforts had led to inconsistent results, suggesting a need for national guidelines to provide health care systems and AHJs with guidance for creating a physical solution for this national issue.

With Ms. Pankey serving as chair, members were recruited for a topic group to address this need with the goal of developing standards for inclusion in the 2022 edition of the FGI *Guidelines*. Convening in late 2018, the multidisciplinary group of 15 industry professionals met online to delve into the challenges, trends, and design needs involved in serving behavioral and mental health patients in emergency departments. They then crafted, proposed, and presented new minimum requirements for scrutiny by members of FGI's Health Guidelines Revision Committee, the body charged with updating its *Guidelines* documents.

To help inform their work, the topic group members conducted literature searches and collected floor plans of newly designed behavioral and mental health units provided for review by various health

care systems. They also conducted a survey asking hospitals whether they had dedicated emergency space for behavioral and mental health patients and if the space was meeting the needs of patients and staff.

The new requirements and recommendations the group developed were presented in the draft of the FGI 2022 *Guidelines*, which was released for public review and comment. This language, with modifications, was eventually approved by the HGRC for publication in the 2022 Hospital and Outpatient *Guidelines* documents.

A subset of the topic group formed a writing team to develop this white paper to facilitate deeper understanding of the rationale for this emerging and innovative health care service along with expanded design and operational guidance. The group has described how behavioral health crisis units are different from the general emergency department and the benefits of such spaces for patients and the health care organization. Suggestions for safety and security as a holistic component of the design process are woven throughout the paper, with application to planning, design, and operations. The ideas and examples presented are intended to encourage flexible design solutions particularly suited to local demographics and preferences. Operational considerations are included to help guide the design team.

Overview of the Behavioral Health Crisis Unit

Too often across the United States, the response to behavioral and mental health patients who arrive in crisis at a hospital ED defaults to a "transfer-to-inpatient-bed" status rather than the quick assessment and follow-up care received by patients who arrive with medical emergencies. This approach has resulted in such great demand for psychiatric beds that individuals end up untreated, suffering, and waiting for beds for many hours—even days. Yet research has shown that 75–80 percent of these patients could have been discharged in less than 24 hours if they had been promptly evaluated

Various names may be applied to a separate, hospital-based setting solely for evaluation and treatment of psychiatric emergencies, but here we will call this setting a behavioral health crisis unit.

and treated in an appropriate location (away from the disruptive, noisy, frightening, typical ED environment).[9]

The behavioral health crisis unit is a distinct space with controlled access, separate from other departments, where emergency stabilization care is provided to patients experiencing a behavioral or mental health crisis. At the core of the BHCU is an open area shared by staff and patients, termed a multiple-patient observation area in the 2022 FGI *Guidelines* but often called a "milieu" in the field. Staff work areas are open and positioned so staff members can

Figure 1: Open Multiple-Patient Observation Area, University of Iowa Crisis Stabilization Unit

Wayne Johnson, Main Street Studio; courtesy of SLAM

[9]C. Stamy, D. Shane, L. Kannedy, et al., "Economic Evaluation of the Emergency Department After Implementation of an Emergency Psychiatric Assessment, Treatment, and Healing Unit," *Academic Emergency Medicine* 28, no. 1 (January 2021): 82–91, *https://doi.org/10.1111/acem.14118*.

observe everyone in the space. Patients typically use recliners to rest or recuperate, and tables are available for small group conversation. Patients also interact with clinicians in this area. Typically, a self-serve snack or nourishment area is open to this observation area and accessible to patients.

Figure 2: View of Patient Recliners from the Nurse Station in Patient Observation Area, University of Iowa Crisis Stabilization Unit

Wayne Johnson, Main Street Studio; courtesy of SLAM

When a BHCU is located in a hospital, it ideally should be immediately accessible (see location terminology sidebar) to the ED. This proximity to the general emergency department allows potential sharing of spaces for performing medical triage and providing support services such as a clean workroom or clean supply room, soiled workroom or soiled holding room, equipment and supply storage, an environmental services room, staff support areas, and support areas for families and visitors.

FGI Guidelines *Location Terminology*

The glossary of the FGI *Guidelines* provides specific definitions for terms used in the documents to describe the relationship between an area or room and other spaces. These definitions are provided here for reference when the terms are used in this white paper.

In	Located within the identified area or room
Directly accessible	Connected to the identified area or room through a doorway, pass-through, or other opening without going through an intervening room or public space
Adjacent	Located next to but not necessarily connected to the identified area or room
Immediately accessible	Available either in or adjacent to the identified area or room
Readily accessible	Available on the same floor or in the same clinic as the identified area or room
In the same building	Available in the same building or an adjoining building as the identified area or room, but not necessarily on the same floor

Stand-alone behavioral and mental health crisis centers are sometimes located elsewhere on a hospital campus or may be embedded in a community. The decision to locate a behavioral health crisis unit in an area away from the emergency department requires careful development of specific protocols for wayfinding, medical triage and clearance, and support services for the alternate space or stand-alone site.

A calming environment is created and supported by the design and features of the BHCU. Access to outside views is generally recommended, and some organizations have integrated outside spaces accessible to staff and/or patients, all supporting a soothing, healing environment.

Surrounding the multiple-patient observation area is any number of single-patient observation rooms and other rooms such as intake, consultation, secure holding, and quiet rooms. The number and types of rooms are determined by the governing body through the work of the multidisciplinary planning team. These decisions are made in developing the functional program and influenced by the findings of risk assessments conducted during the planning phase.

Targeted Patient Population

Emergency department behavioral health crisis units (BHCUs) are intended for individuals with a serious mental health emergency, typically defined as a situation caused by a behavioral health condition in which an individual is dangerous to self and/or others, so impaired they cannot care for self or others, and vulnerable to putting self and others at risk for physical harm. These patients cannot be safely treated in a lower

acuity setting where a less restrictive level of care is provided. The demographics of this patient population cross all racial, ethnic, gender, and sexual identity lines. Individuals with histories of chronic mental illnesses such as schizophrenia, bipolar disorder, and major depression tend to be overrepresented in the population, and a substantial percentage also have comorbid substance use disorders.

For patients to be considered stable, the acute conditions that led them to the BHCU will have resolved to a subacute level. A popular maxim in the field of emergency psychiatry is "our goal is to turn emergency patients into outpatients."

Benefits of BHCUs

Since the great majority of behavioral and mental health emergencies can be resolved in less than 24 hours with prompt, appropriate intervention, it makes sense to try to treat behavioral and mental health crises in emergency settings. However, resolving those symptoms in a standard ED can be complicated.

Early intervention in a crisis can stabilize patients with acute behavioral and mental health emergencies and avert inpatient admissions.

The ED can be a frightening or agitating environment for patients in a mental health crisis, as they are often restrained on gurneys or stuck in corners or cubicles guarded by a sitter, amid police and ambulance personnel, flashing lights, loud noises, hectic activity, and the nearby cries of others in pain. Paranoid or anxious patients, who might benefit from extra space or the ability to move about, may be restricted to a small, confined area. It has long been recognized that the standard ED setting may actually exacerbate the symptoms of a behavioral and mental health crisis.

Those suffering from acute behavioral and mental health conditions understandably will do better in more calming, supportive settings with trained psychiatric personnel. The combination of a prompt professional assessment and treatment in a compassionate, healing environment can lead to impressive results, especially in patient safety, symptom relief, and reduced need for coercive

interventions.[10] Behavioral health crisis units typically report the use of physical restraints and/or forced medications in far lower percentages than standard emergency departments. Seventy-five percent or more of inpatient hospitalizations can be avoided where treatment is available in a behavioral health crisis unit, sparing those available inpatient beds for those who truly have no alternative.

Behavioral health crisis units can help hospitals achieve the triple aim of health care: enhancing patient experience, improving population health, and reducing costs.[11] By minimizing boarding (holding a medically cleared patient until a mental health evaluation or transfer can be conducted), which can cost EDs an average of $2,264 per patient,[12] and avoiding unnecessary hospitalizations, which can cost $8,000 to $10,000 or more, the financial benefits of a behavioral health crisis unit are clear. And moving individuals in crisis out of the ED makes ED beds available for other medical emergency patients. Best of all, BHCUs are truly a win for behavioral and mental health patients, providing swift relief and recovery for those who traditionally have been underserved and too often detained with minimal care in less-than-optimal locations.

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[10]Committee on Psychiatry and the Community for the Group for the Advancement of Psychiatry, *Roadmap to the Ideal Crisis System: Essential Elements, Measurable Standards and Best Practices for Behavioral Health Crisis Response* (National Council for Mental Wellbeing, March 2021), *https://www.thenationalcouncil.org/resources/roadmap-to-the-ideal-crisis-system*.

[11]The IHI Triple Aim is a framework developed by the Institute for Healthcare Improvement (IHI) for optimizing health system performance. New designs are developed to simultaneously pursue three dimensions, which are called the "Triple Aim": Improving the patient experience of care (including quality and satisfaction), improving the health of populations, and reducing the per capita cost of health care.

[12]B. A. Nicks and D. M. Manthey, "The impact of psychiatric patient boarding in emergency departments," *Emergency Medicine International* 2012 (July 2012):360308, *https://doi.org/10.1155/2012/360308*.

Benefits of Having a Behavioral Health Crisis Unit to Supplement the Emergency Department

Benefits for the emergency department

As many as one in seven visits to the ED are behavioral or mental health in nature. Provision of a behavioral health crisis unit will allow these patients to be treated adjacent to or outside of the ED environment. When mental health patients do not have to wait for a prolonged period for treatment in the ED, the ED room turnover rate increases, yielding positive financial impacts.

Benefits for emergency department staff

A separate behavioral health crisis unit allows the emergency staff to focus on the needs of the patient population, reducing the average length of stay for both medical and mental health patients. Staff efficiency increases when patients are treated sooner rather than later. In a standard ED, a sitter (individual staff member whose sole task is observing a patient) is assigned to behavioral and mental health patients. A separate behavioral health crisis unit is staffed with those specifically trained and experienced with these patients, which is safer for the staff.

Benefits for patients

Because of the BHCU design, there is typically much less need for coercive treatments such as physical restraint or forcible injection of medications than in a standard ED. A less chaotic healing environment designed to allow movement and activity helps empower patients and accelerates treatment. Focused and well-observed care supports informed development of an appropriate aftercare plan. As well, the effectiveness of a preliminary treatment plan will be reviewed in the unit prior to discharge of the patient, resulting in a more thorough assessment of patient response.

Benefits for the community

The presence of a behavioral health crisis unit provides an appropriate location for behavioral and mental health patients to get the right treatment in a timely manner. The unit provides a valuable resource for local law enforcement, mobile crisis teams, and social services departments.

Overcoming Potential Challenges and Objections

Behavioral health crisis units are typically locked, which permits care for both voluntary and involuntarily detained individuals. This arrangement allows patients to move about freely without the elopement concerns of the general emergency department, where behavioral health patients are often guarded by a sitter or secured to a gurney to prevent unauthorized departure. The locked,

access-controlled environment of a BHCU also prevents non-designated personnel from entering or passing through the unit, preserving patient privacy and minimizing disruption.

While most stakeholders, including patient advocacy organizations such as the National Alliance for Mental Illness, quickly recognize the advantages of BHCUs over a stay in a standard emergency department, some pushback may arise from stakeholders who believe all behavioral health crisis care should be done in "community" settings outside of hospitals. And indeed, as much crisis care as can be done safely in the community is to be encouraged. Community care and hospital-based crisis units, however, should not be thought of as "one or the other" but as complementary programs. BHCUs are intended for individuals whose condition is considered "too acute" or who have a medical comorbidity that exceeds the capability of a community site.

Even regions with excellent community crisis alternatives see a substantial number of behavioral and mental health emergency patients presenting to area medical emergency departments. In fact, most community programs have algorithms for more complicated patients that end in "send to ED."

Patients with the following characteristics, who may be excluded from typical community crisis programs, may benefit from treatment in a BHCU:

- Currently agitated/aggressive
- History of violence/aggression
- Profound symptoms of psychosis/disorganization
- Severe suicidal ideation or a serious suicide attempt in the current episode
- Active substance/alcohol intoxication
- Active substance/alcohol withdrawal
- Involuntary status (need for emergency care that cannot be addressed in other settings)
- Active criminal charges

- Glucose abnormalities/need for insulin
- Vital sign abnormalities
- Need for wound care or treatment of other pronounced comorbid medical issues
- Serious developmental disabilities/neurological issues
- Too frequent use of the crisis program/recidivists
- Refused indicated medications

Nurse stations in BHCUs are typically integrated into the multiple-patient observation area rather than separated as an enclosed, locked "fishbowl." Opposition to the use of open nurse stations may arise, but this can be mitigated by the many positives an open design offers. For example, staff who work directly in the setting can quickly recognize when a patient is having difficulty and intervene before agitation or aggression develops. When staff are separated from patients, especially behind glass, paranoid or despondent patients might see staff laughing and fear the laughter is about them, leading to anger that can evolve into dangerous behavior. Similarly, removing soundproof barriers and allowing patients to directly engage with and receive the attention of experienced behavioral health staff reduces sources of patient frustration and anger.

Staff members who might be concerned about not having access to safer spaces may respond positively to provision of an "area of refuge" behind a strategically placed locked door, where they may retreat during a serious threat. Staff should not spend an excessive amount of time in these locations, however, as their presence in the open patient observation area will enhance overall safety and lead to better patient outcomes.

Recognition of the benefits of BHCUs by more and more health care organizations, regulators, and health care-related standards and certification bodies is driving the need for development of professionally vetted guidance through interdisciplinary and evidence-based methods. Further standardization and development of globally relevant guidelines will assist in creation of optimal program designs.

Planning for a BHCU Project

Three primary considerations are important when beginning the development of a behavioral and mental health crisis unit: development of a functional program, a location for the BHCU, and access to the unit. The information here is intended to supplement the minimum requirements for design of a BHCU and the accompanying appendix material published in the 2022 edition (or later) of the FGI *Guidelines for Design and Construction* documents for hospitals and outpatient facilities.

Functional Program

As for other health care design and construction projects, the governing body designates a multidisciplinary team to prepare a functional program that will serve as a foundation for development of the behavioral health crisis unit. It is critical for this team to include clinicians and others with detailed knowledge of the clinical functions planned for the BHCU.

The functional program describes the organization's intent for the type of patient services to be provided and the planned operational function of the unit and indicates the number and type of patient care areas as well as the clinical, staff, and patient support areas that will be needed. The BHCU support areas that must be located in the BHCU and which, if any, can be shared should also be identified.

Project features defined in the functional program include the purpose of the project, the environment of care, anticipated patient types, planned treatment types, staffing levels, security needs, patient safety provisions, and the operational flow for patients, staff, and support services. The 2022 FGI *Guidelines* provides minimum requirements and recommendations for diagnostic, treatment, and support areas in the BHCU. See Section 2.2-3.2 (Behavioral Health Crisis Unit) in the Hospital *Guidelines* and Section 2.8-3.5.7 (Behavioral Health Crisis Unit) in the Outpatient *Guidelines*. Treatment and support spaces may be required, optional, or

shared with an immediately accessible emergency department. The functional program for a specific project indicates which treatment and support areas will be included and thus which sections of the *Guidelines* are applicable.

The sample functional program template shown in the sidebar below provides a roadmap for writing a project-specific functional program for a behavioral health crisis unit. This example is intended to help owners and designers fully describe the behavioral and mental health patient types, types of treatments, treatment areas, therapeutic environment of care, patient flow, safety features, security measures, and staffing model. The functional program serves as the basis for the project design and construction documents.

Sample Functional Program Template for a Behavioral Health Crisis Unit

Why

Describe how this dedicated behavioral health crisis unit (BHCU) provides a calming therapeutic environment where patients in a state of crisis can receive quick access to behavioral and mental health care with trained staff who focus on collaboration and engagement rather than coercion.

Where

- Indicate whether the BHCU will be located:
  - In the hospital emergency department
  - Immediately accessible to the hospital emergency department
  - Elsewhere on a hospital campus
  - In a freestanding emergency care facility
  - In a separate stand-alone facility
- Describe where patients will be medically screened prior to entering the BHCU.
- Describe the patient arrival and intake process.

- Describe how the environment of care will provide:
  - A therapeutic environment
  - Natural light
  - Opportunities for patient control of the environment
  - Patient safety
  - Patient privacy
  - Security
  - Staff safety

Who

- Describe the patient types to be served:
  - Age level (child, adult, or geriatric)
  - Voluntary, involuntary, or forensic
  - In need of acute care
  - Substance use status
- Define the staffing model:
  - Number and type of staff
  - Staff-to-patient ratios

When

- Indicate anticipated peak hours of admission.
- Describe the average length of patient stay expected before inpatient admission or discharge to the community.

How

- Describe how patients in need of acute care will be stabilized.
- Describe the risk assessment process that will be used to determine the appropriate patient care area (high, medium, or low risk) for each patient.
- Describe how the unit will be designed to provide a safe and secure environment, including the following:

  - Security station
  - Staff observation of patient care areas
  - Security cameras
  - Duress alarms
  - Locks
  - Perimeter security

- Describe the ligature-resistant features to be provided throughout the BHCU, specifying those for high-, medium-, and low-risk patient care areas.
- Describe opportunities to be provided for patient control of the environment.
- Describe how staff visual control (including electronic surveillance) will be enabled for corridors, dining areas, and social areas.
- Where nurse stations will be open to patient care areas, describe provisions to assure staff safety.
- Describe provisions intended to support patient privacy.

What

- Describe patient care areas to be provided:
  - Triage rooms for initial assessment
  - Consultation rooms
  - Open patient care area with recliners
  - Observation rooms or suites
  - Quiet room
  - Secure holding room
- Describe patient support areas to be provided:
  - Patient toilets
  - Patient shower(s)
  - Nourishment area
  - Outdoor area

- Medication safety zone(s)
- Clean supply room or workroom
- Soiled holding room or workroom
- Environmental services room

- Describe staff support areas to be provided:
  - Staff lounge
  - Staff/team offices
  - Staff toilets
  - Staff shower
  - Staff lockers

Options for Unit Location

A behavioral health crisis unit can be situated in a number of locations in an acute care hospital or in an outpatient setting. Several service and operational characteristics particular to each of these settings distinguish the function and benefit of the BHCU in each location and type of site. The positive impact of the facility can be maximized when the project design approach considers the institution's specific goals for the crisis unit and the unique opportunities and needs of the project location.

BHCU Location Requirements in the 2022 FGI Guidelines

The following content from the 2022 Hospital *Guidelines* provides requirements for a behavioral health crisis unit that will be located in a hospital or on a hospital campus.

***2.2-3.2.1.2 Location**

**(1) The unit shall be in or readily accessible to the emergency department.*

(2) For renovations, where it is not feasible for the unit to be in or

readily accessible to the emergency department, the unit shall be permitted to be located elsewhere on the hospital campus.

(3) Where the behavioral health crisis services are provided in a separate building on campus, location of the behavioral health crisis unit in that building shall be permitted.

In the *2022 Outpatient Guidelines*, the requirements can be found in Section 2.8-3.5.7.1 (2) (Behavioral Health Crisis Unit: General—Location) in the chapter on freestanding emergency care facilities:

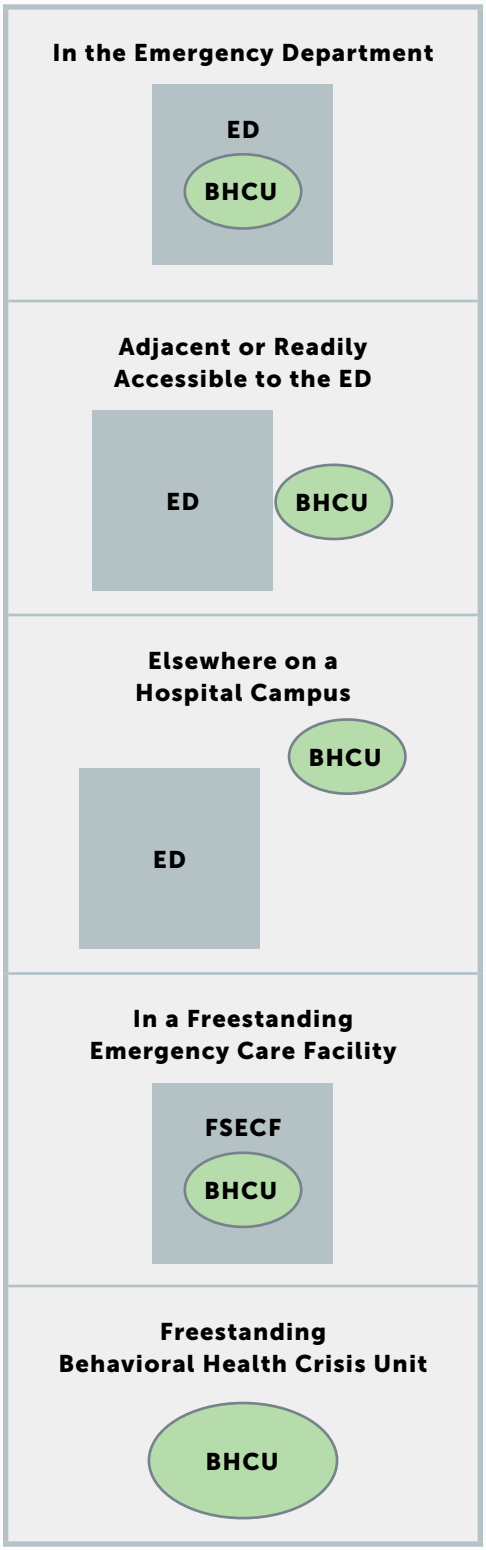
(2) Location. The behavioral health crisis unit shall be permitted to be part of the freestanding emergency care facility or a separate, stand-alone facility.

As the options are reviewed, the following important characteristics must be considered:

- All new construction options presume that all key elements can be optimized. For a location in "found" space in an existing setting, the goal would be to optimize the majority of those key elements.
- Consider the safety and visibility of the entrance to the BHCU from an exterior entry accessible to the general public or through an ED entry.
- The availability of space is presumed to be unique to each setting, and therefore cannot be evaluated outside that context.

In the emergency department. A crisis unit embedded in an emergency department but partitioned from the main section of the ED can support an effective process for arrival, medical clearance, and escorted entry to the crisis unit. Such an embedded unit offers a practical opportunity for the BHCU and ED to share clinical support services, spaces, and staff. A disadvantage to this location, however, could be an inability to provide a calm environment or open space in which patients can convalesce or pace, which is critical for patient stabilization.

Figure 3: Possible Locations for a Behavioral Health Crisis Unit



Adjacent or readily accessible to the emergency department. A BHCU close to the emergency department can support an effective process for arrival, medical clearance, and escorted entry into the unit as an embedded unit does, but this location also facilitates the provision of a calm environment. Opportunities to share clinical support spaces or staff are likely to remain, but may begin to diminish depending on the travel distance between the crisis unit and the ED and the security system and protocols employed for each.

On the hospital campus separate from the ED. Renovation of an existing facility may present challenges in finding available space for a BHCU, resulting in a unit located elsewhere on the hospital campus. At certain facilities, a crisis unit that is separated from the emergency department could be the most effective location, potentially aligning with other behavioral health programs or dedicated behavioral health facilities. With this location, however, patient escort protocols for transporting patients from the ED to the crisis unit as well as medical clearance procedures for patients who arrive directly to the crisis unit must be developed.

In a freestanding emergency care facility. Mirroring some of the advantages for units in or adjacent to an ED at an inpatient hospital, a crisis unit located in a freestanding emergency department can support critical behavioral and mental health services at a facility where patients are likely to present themselves for services. Similar advantages exist for effective medical clearance and access to the crisis unit as well as opportunities for shared services and staff.

In an outpatient setting. A BHCU situated in an outpatient setting might provide the best opportunity to locate a crisis unit where the community most needs access to crisis and stabilization services. It can be a stand-alone building or co-located with or near other facilities housing outpatient behavioral and mental health programs. In this approach, the BHCU has a direct role in the community's continuum of behavioral and mental health care.

Common Access Concerns

Community awareness of where to go for emergency behavioral and mental health care is the first step in supporting access to the services of a behavioral health care unit. Some communities may have multiple options for emergency medical care but far fewer options for emergency behavioral health care. In these cases in particular, individual provider organizations and community service organizations should strive to educate the general public as well as emergency transport services and other service providers (including the police) regarding locations that are appropriate for behavioral and mental health crisis care.

Described here are some design and operational aspects of a BHCU that can affect the first impression it makes on those presenting with a behavioral health crisis and thus the attractiveness of the facility as an option for care.

Clear signage and visual cues. Unambiguous signage is essential, but obvious wayfinding cues (e.g., lighting, color codes, layout and flow) are equally important. For care settings that are part of an emergency department, these initial cues may be relatively easy to establish, but where behavioral health entries are separate from entries for other emergencies, clear signage for parking and building entry is imperative.

Provision of a calming and private welcome.[13] To avoid exacerbating behavioral or mental health crises, it is essential that both the entrance to and interior of a behavioral health crisis unit present a calming environment and a welcoming staff presence to allay patient anxiety.

An important aspect of a patient's arrival process is conveying a sense of respect for their privacy and anonymity. A thorough staff explanation about "what to expect next" and an orientation to the unit's design, offerings, and behavioral expectations can be essential

[13]Admittance to a behavioral health care setting is often referred to as "intake," a term that implies a clinical setting but may not support the concept of a calming atmosphere.

components of the intake process and reduce the chance of disruptive behavior upon entry.

Fluid process for medical clearance and care. It is essential that a patient receive a medical clearance before entering a behavioral health care setting to assure there are no physical health issues that must be addressed prior to, or concurrent with, the behavioral care to follow. The health care organization should have plans for where such assessments will be conducted and how patients will transition to care in the BHCU. A room for staff to meet with family and another room for medical evaluation may be provided outside the main clinical area of the BHCU.

Carefully planned physical access to the BHCU. Organizational policies and procedures will dictate how patients and visitors may enter a behavioral health crisis unit. Operational considerations for direct access to spaces for patient or family interview, family waiting, storage of patient belongings, medical evaluation, and a patient toilet or shower should also be carefully considered in the context of unit access.

Access to the unit may be provided at different entry points depending on mode of arrival and patient condition. A walk-in patient may arrive at the main entrance of the ED triage station, while others may arrive via ambulance or police escort. A recent study states, "1 in 3 individuals experiencing a mental health crisis are transported by police to a hospital emergency department."[14] This statistic suggests that a significant proportion of arrivals may be via a private vehicle driven by someone unfamiliar with the destination. In addition, as a result of a national effort to distinguish those in behavioral health crisis from those needing a police response, a community's emergency response system could include public or private vehicles for transport that are not part of law enforcement.

Where patients are expected to arrive in police custody, planners should consider including a separate entrance with additional

[14]Steven Ross Johnson, "The Right Care by the Right Person," *Modern Healthcare Magazine* (November 3, 2020).

private areas. Special provisions such as a weapon-unloading system and gun lockers for law enforcement officers can be discreetly incorporated, providing enhanced safety measures without adversely affecting the entry experience.

Technology for secure access should be researched and incorporated early in project design. To support safety and prevent elopement, units are often secured using a sally port, which is a secure entryway consisting of a series of interlocking doors or gates.

Safety Risk Assessment

A safety risk assessment (SRA) should be initiated and managed by the governing body and/or its designees in the planning phase of a BHCU project. The multidisciplinary SRA team identifies hazards and potential risks based on patient types, treatments or services provided, the physical environment (design), and operational policies. The SRA team should evaluate all patient care areas and assign a risk level (e.g., high, moderate, low) to areas where patients may be at risk of harm to self or others. The mitigating features of the identified at-risk locations, including security, architectural details, surface materials, building system equipment, and operational policies and procedures, are defined in the SRA. Further, this assessment should help inform security technology to be implemented, such as video surveillance, access control, and duress alarms (both fixed and personal). Once established, the SRA should be updated annually or when risk levels change.

See Section 1.2-4 (Safety Risk Assessment) in both the Hospital and Outpatient FGI *Guidelines* documents for minimum requirements.

The BHCU, its adjacencies, and its potential for operational association with the ED, where employees are at high risk for injury, underscores the need for a robust safety and security risk assessment to mitigate the potential for staff and patient injuries. Numerous strategies for making physical design and operational decisions can be identified during the risk assessment process. Table 1 provides examples of such strategies.

Table 1: Strategies for Safety and Security

Goal	Intent	Methods
Staff and visitor identification	Identify authorized individuals in the unit.	• Employee badges • Visitor management software
Controlled access	Permit only authorized individuals in the unit.	• Electronic access control systems • Secure sally port entry and exit • Buffer zones • Time-delayed egress • Designated visiting hours
Perimeter detection	Prevent unauthorized or unwanted intrusions to the unit.	• Perimeter detection alarms (e.g., sensors on doors and windows, surveillance cameras) • Adequate interior and exterior lighting • Monitored radio frequency for devices worn by patients
Reduced risk for patient suicide	Reduce safety risks inherent in the unit's patient population, including patient elopement.	• Behavioral and mental health risk assessment to identify and mitigate features that could be used to attempt suicide • Training of staff caring for at-risk patients • Assignment of patient self-harm risk categories to each room • Surveillance cameras
Staff safety	Identify staff risks and mitigations to address them and improve safety on the unit.	• Fixed and portable duress alarms • Video surveillance • Staff training • Required staff competency in verbal and non-verbal de-escalation techniques

The Project Design Process

The design guidance for the behavioral health crisis unit given in this section digs deeper than the minimum design and construction requirements for these units in the FGI *Guidelines*. The suggestions that follow offer ideas and methods that can be used while applying the *Guidelines* minimum requirements. They are not intended to thwart creative design details that may be more appropriate in specific applications.

Key to a successful design is understanding the patient population as well as the therapies that will be offered in the unit. With that in mind, specific design strategies should be taken into consideration regarding access, flow, adjacencies, and management of the unit to support provision of optimal care and safety of patients and staff.

The BHCU design should reflect the client's vision of the services to be offered, the community to be served, and the specific circumstances to be accommodated. Even with consistent minimum design and construction requirements, the resulting units are bound to be unique across health systems.

Programming

The programming phase is a critical first step in the design process in which the scope of a project is reviewed and needed research is identified. During programming, the design team and the clinical operations team confirm key planning figures (e.g., number of recliners and beds) and allocate appropriate support spaces to ensure the new or renovated unit includes all areas and spaces necessary for effective and efficient execution of the operational model described in the functional program. See Table 2 (Summary of BHCU Spaces) for an annotated list of rooms and areas that may be included in a behavioral health crisis unit. To determine space needs for a specific project, refer to the functional program and operational plans for the BHCU.

Table 2: Summary of BHCU Spaces

Space	Intended Uses	Features and Characteristics	Rationale
Intake room or area	Initial assessment prior to beginning treatment	Located near entrance Two means of retreat for staff safety Typically designed as a high-risk space	Patient behavior is an unknown risk.
Nurse station (commonly referred to as a care team station)	Often considered home base for the care team. The care team will use this space to conduct clinical tasks and documentation; observe patient care areas, directly or via surveillance cameras; and meet with other staff.	Minimizes patient access to devices, supplies, and documentation Provides good visibility to patient care areas Promotes staff interaction with patients Surveillance camera monitors (if present) shielded from patient view	The care team often requires a safe, designated staff space that allows for patient observation. Where the nurse station is open to a multiple-patient observation area, provision of a directly accessible, lockable staff work area should be considered.
Staff toilet room	When nature calls…	Separated with locked door Located near nurse station Directly accessible to the unit	A toilet room that is convenient for staff to access minimizes time away from patient care areas.
Medication safety zone	Storage for medication to be administered on the unit. Medication may be administered from this zone.	Located out of circulation path Separated with locked door from other spaces Work counter Handwashing facilities Acoustic design to minimize sound transmission Visible to the nurse station	Most jurisdictions require medication to be stored in a secure location. Separation with a locked door is a best practice.
Exam/ treatment room	Medical assessment and minor medical treatment for patients on the unit. This space might be used to medically clear a patient prior to admission to the BHCU.	Handwashing facilities Often designed as a medium-risk space Secure storage	Exam/treatment rooms located in the BHCU will reduce the need for patients to leave the unit for medical examination or treatment.

Table 2: Summary of BHCU Spaces (*continued)*

Space	Intended Uses	Features and Characteristics	Rationale
Multiple-patient observation area	Provision of a therapeutic and comfortable setting in which patients can stabilize and receive therapy and treatment	Open-plan area Directly visible from nurse station Camera surveillance Furnished with recliners and/or other patient care station types Furnished with small activity tables Access to daylight Non-institutional décor Could be designed as a high- or medium-risk area depending on facility and acuity of patients	A therapeutic stabilization and treatment space has proved to reduce average length of stay for many patients. An open area provides space for a variety of patient activities and direct visibility of patients by staff.
Single-patient observation room	Observation of patients in a private space	Designed for only one patient at a time Observable from a constantly attended location (i.e., a nurse station) Camera surveillance considered where direct visibility from the care team station may be impeded Typically designed as a high-risk space	Some patients may benefit from private observation. If a patient is too disruptive, staff can move that patient to this room.
Patient toilet room	When nature calls…	Durable, tamper-resistant, and ligature-resistant fixtures, finishes, and hardware throughout Anti-barricade door options Designed as a high-risk space	Staff need to be able to monitor and access the room without compromising patient dignity and privacy.
Shower room	Patient hygiene	Durable, tamper-resistant, and ligature-resistant fixtures, finishes, and hardware throughout Designed as a wet location Designed as a high-risk space	Access to a shower helps to provide a hygienic, shared patient care environment. Staff members need to be able to monitor and access the room without compromising patient dignity and privacy.

Table 2: Summary of BHCU Spaces (*continued)*

Space	Intended Uses	Features and Characteristics	Rationale
Quiet room	A quiet space for patients to go when they are agitated	Calming, color-changing lights Minimal stimulation from other patients or the environment Acoustic privacy from common areas Often designed as a high-risk space	Quiet rooms and similar spaces increase patient choice and can help calm a patient, reducing the need for involuntary medication or physical restraint.
Secure holding room	Temporary holding space to provide patients a secure environment until they are ready for treatment or transfer to another facility	Separated with locked door Designed for one patient at a time Observable from a constantly attended nurse station Small window in the door or the wall adjacent to the door Camera surveillance may be added Design as a high-risk space	This is a dedicated, patient-safe environment for short-term use during a crisis for which other spaces on the unit may not be appropriate.
Consultation room	A private setting in which patients can meet with a provider	Considerations: Barricade-resistant hardware Vision panel for door or wall Duress alarm Options for staff retreat Patient-facing design	Consultations with a psychiatrist, social worker, therapist, or other professional should occur in a private setting.
Nourishment area	Storage for snacks and beverages for patient use	Extent of patient access determined by the facility risk assessment and functional program Work counter with easily accessed snacks and beverage dispenser so patients can serve themselves Ice machine Handwashing facilities Patient food refrigerator Storage for non-refrigerated food	Designated space for patient nourishment increases choice and a sense of normalcy.

Table 2: Summary of BHCU Spaces (*continued)*

Space	Intended Uses	Features and Characteristics	Rationale
Outdoor area	Space for patients to sit, walk, converse, or engage in leisure activity outdoors	Enclosed, secure, safe, and elopement-resistant Visible from the nurse station Dedicated space separate from public spaces and paths	Access to nature and daylight has proved to be therapeutic. It can reduce stress and anxiety, which in turn promotes a safer environment for staff and patients.
Clean workroom or clean supply room	Storage of clean supplies used in the unit and/or space for work activities associated with these supplies	Separated with locked door	Space designated for these uses must be accessible to staff only.
Soiled workroom or soiled holding room	Storage for soiled supplies prior to processing and/ or associated work activities	Separated with locked door Negative pressure ventilation	Space designated for these uses must be accessible to staff only.
Equipment and supply storage	Storage of equipment and supplies used in the unit	Separated with locked door	Space designated for storage of equipment and supplies is needed.
Environmental services room	Storage for environmental services supplies	Separated with locked door	Designated space for environmental services supplies should be inaccessible to patients.
Family lounge/ waiting area	Public waiting area (not for patient visitation)	Located outside of patient care area Located near public toilets Amenities, as appropriate, including space for family/visitor consultation	A comfortable space for family and visitors that is separate from patient treatment areas can reduce complications and potential negative effects of interactions with all patients and staff.

Design Considerations

The primary purpose of a behavioral health crisis unit is to accommodate the safe and efficient assessment and stabilization of individuals suffering from an acute behavioral or mental health crisis. When planning and programming a BHCU to best serve its location and goals, taking certain qualitative criteria into consideration may elevate the effectiveness of the unit and result in high patient and staff satisfaction.

Creation of a calming environment. It cannot be emphasized enough that a calming environment contributes to the efficacy of a BHCU. This characteristic, a driver in the design of psychiatric inpatient units, remains relevant in the planning and design of a dedicated crisis unit. Establishing a therapeutic environment that calms and reduces stress in those experiencing crisis will optimize the clinical and social results of the care provided in the BHCU. A welcoming and well-organized BHCU benefits not only patients but the staff who care for them and the families that support them.

A number of factors contribute to creation of such an environment:

Exposure to daylight and nature. Views to the exterior that offer a positive distraction as well as a time reference can steady an individual experiencing discomfort, disorientation, and stress. In the absence of or in addition to this direct connection to nature, interior design and art displaying nature can enhance the quality of a space without compromising its functionality.

Noise mitigation. Unpredictable behavior that generates considerable noise can, and likely will, occur on occasion in a BHCU. A design that thoughtfully mitigates the transmission and resonance of unfavorable noise will help calm patients who are unwilling recipients of such acoustic interruptions. Thoughtful planning and selection of interior building materials can contribute to the management of noise.

Options for patient location. Managing social density to decrease violence and aggression is a primary tenet of psychiatric facility

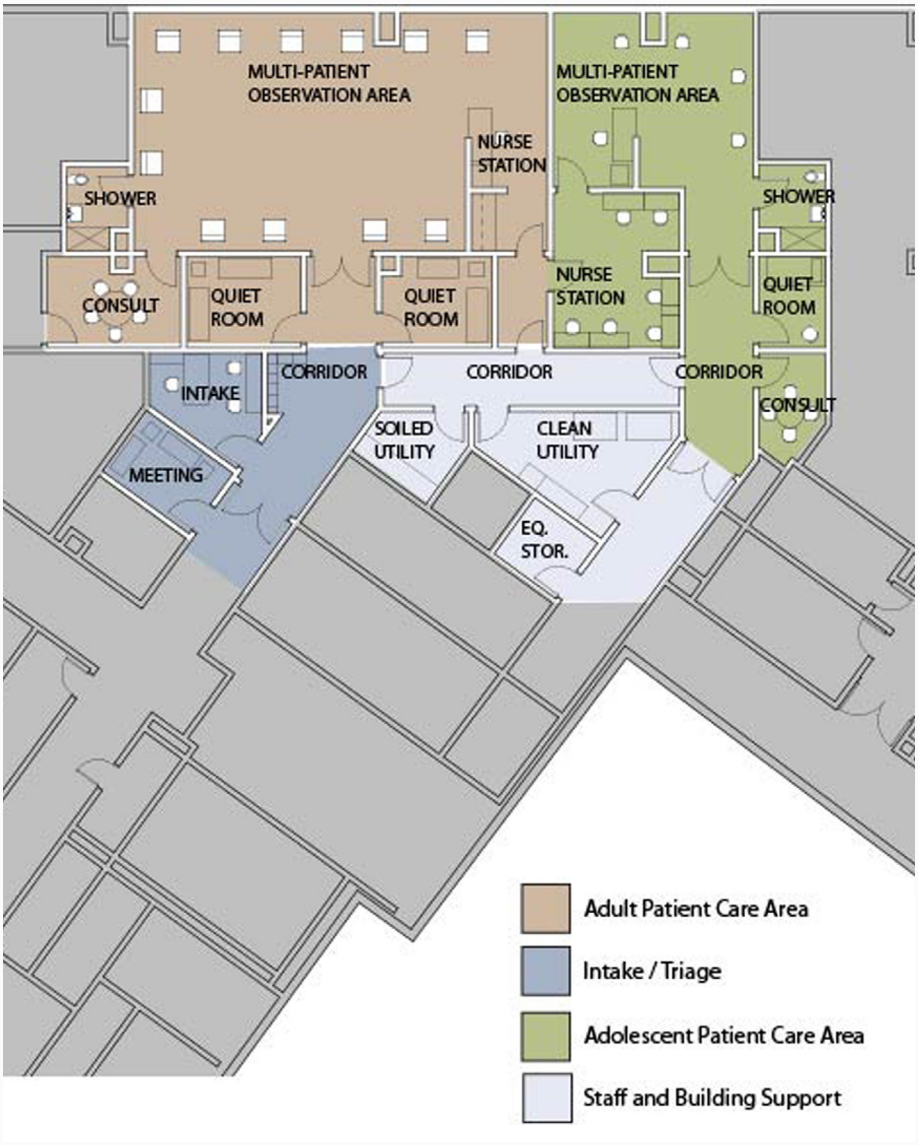
design. By reducing the number of people in a space, the likelihood of undesirable person-to-person interaction is minimized. In a BHCU, where patient activity is often consolidated and staff observation is paramount, offering patients a choice in terms of where they can spend their short stay may contribute to a more therapeutic environment.

Soothing interior design. Comfortable furnishings, a well-crafted color palette, and balanced and flexible artificial lighting can contribute to a calming ambience in the unit.

Figure 4: Psychiatric Emergency Department Floor Plan, Erie County Medical Center

Kideney Architects

Figure 5: Sample BHCU Floor Plan



CentraCare Hospital, St. Cloud, Minnesota

Patient safety. Historically, the approach to patient safety in clinical psychiatric environments, particularly crisis units, has been either a makeshift attempt to modify materials, components, and systems that are inappropriate for this type of space or to borrow institutional solutions that are too narrowly focused on patient safety alone. Both approaches tend to inhibit the creation of calming, therapeutic environments and often result in mediocre patient safety solutions, often with an emphasis on ligature resistance.

However, in a setting serving patients in behavioral health crisis, patient safety considerations should also address weaponization, cutting, durability, hiding, elopement, and wedging opportunities, and designers should endeavor to employ products and systems that enhance the therapeutic environment.

Fortunately, research and development of patient-safe products has expanded greatly in the last 10 to 15 years, offering a broader range of options to mitigate safety concerns at the same time facilitating creation of a built environment that supports the clinical mission of appropriate care for behavioral and mental health patients.

Unit layout. Unit layout can be approached in a variety of ways based on patient acuity and volume. Key to a successful design is understanding the patient population and the therapies that will be offered in the unit. With this information in mind, design strategies can be developed to address access, flow, adjacencies, and management of the unit to support provision of optimal care and the safety of patients and staff.

Planning for adjacent spaces in the BHCU layout is critical for effective clinical operations, and arrangement of external adjacencies can be just as vital.

Adjacencies: Spaces strategically laid out next to each other to optimize the flow of function and movement

External adjacencies. Whether a BHCU is on an inpatient campus or in a freestanding facility, the location of the unit entrance and the adjacencies associated with it are critically important. The entry must be treated like an ED entry, with particular attention given to provision of discreet access and special accommodations for patients escorted by the police department or emergency medical services.

If the BHCU is on an inpatient campus, the location of the entrance should be carefully coordinated with the entrance to the ED and other public entrances with the goal of easing access and accommodating patient and family discretion. Whether the BHCU has a dedicated external access point or not, the internal access point connecting it to the ED must be carefully placed so the route for escorted patient transfer from the ED offers safety, security, and a positive experience for all patients.

For BHCUs that are either immediately or readily accessible to the ED, clinical support services may be shared between the departments, but this arrangement must be carefully coordinated. Travel distances to shared facilities (e.g., clean and soiled workrooms, storage spaces) must be analyzed from each department to confirm these spaces can effectively support each team. In particular, coordination of shared spaces with secured access features such as a sally port between the ED and the BHCU must be carefully considered. Depending on the staffing model for the BHCU and the security provisions connecting the departments internally, effective use of shared services may not be possible.

Internal adjacencies. Establishing appropriate internal program adjacencies in the BHCU is vital to effective unit operations, patient and staff safety, and support of the intended patient experience. A site-specific operational plan will be developed for each BHCU, and this plan will guide programming and planning considerations.

Understanding and planning for key adjacencies (e.g., patient intake, inventory and storage of patient belongings, initial patient evaluation and interview, family waiting, police department accommodations, patient shower) can facilitate development of security provisions and inform circulation design and operational flow. Thoughtful planning for the operational circulation of the unit, considering patients, families, and the clinical team as well as movement of materials in and out of the unit, will inform zoning and spatial relationships for the BHCU.

Implementing an overarching strategy for effective visualization throughout the unit is critical to assure effective team observation of patient spaces and security for staff and support spaces. Locating the nurse station in an open multiple-patient observation area is vital to providing the clinical team with a clear view of the overall patient care area, including seating clusters, ambulating space, eating areas, and other included spaces. Organizing patient spaces around a centralized nurse station supports visibility as well as efficient staff access throughout the unit.

A quiet room would be located adjacent to the multiple-patient observation area to make it available for individual patients who want to de-escalate on their own. A direct line of sight from the nurse station is critical.

A secure holding room can be located near the multiple-patient observation area, single-patient observations rooms, or the unit entrance.

Special considerations. The specific demographics and strategic vision for an individual BHCU will determine what other elements should be considered for a particular project. The mix of treatment environments and, importantly, the patient cohorts that will make up the overall census are particularly relevant. Pediatric, adolescent, adult, and geriatric patients have specific care needs, making it advisable to provide care for children and adults, for example, in separate spaces.

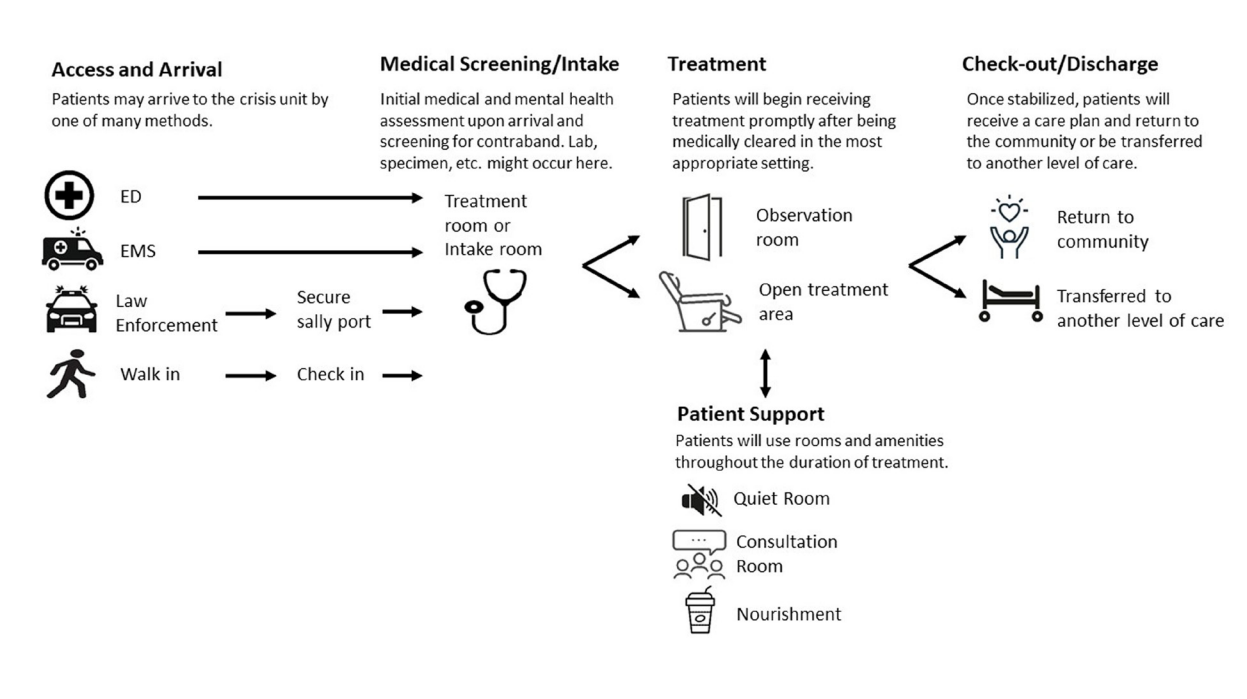
Circulation. Careful planning of the flow for patients, staff, and support services in a BHCU is vital to the operational efficiency of the unit and to creation of a safe, therapeutic environment. Generally, designers and planners should aim to provide distinct paths for each group with a need to enter the unit to reduce the risks and environmental stressors that tend to arise from unplanned interaction between them.[15] Where a crisis unit is co-located with an emergency department, attention to the flow into the BHCU is even more critical.

Patient flow. The flow of patients to and within a BHCU should generally be limited to one or two paths, depending on external factors such as programmatic adjacencies, existing built conditions, or facility operations. As in many EDs and urgent care facilities, there should be a flow in (intake, triage) and a flow out (discharge). These paths should promote a sense of normalcy but also have appropriate

[15]Stephanie Liddicoat, "Enhancing emergency care environments: Supporting suicidal distress and self-harm presentations through environmental safeguards and the built environment," *Patient Experience Journal* 6, no. 3 (2019):91-104, https://doi.org/10.35680/2372-0247.1361.

security features (e.g., access control, good sight lines, good lighting, surveillance cameras). Quality lighting, views to the exterior and public spaces, and pleasant finish materials all contribute to a more inviting admissions experience and can enhance safety.

Figure 6: Care Flow Diagram for a Behavioral Health Care Unit



As much as possible, circulation paths for behavioral health patients—particularly those in crisis—should not pass through spaces dedicated to support services, staff-only zones, or other diagnostic/clinical service areas serving a broader patient census. Further, the distance patients must travel to and from the unit should be kept to a minimum. Some BHCUs with projected high volume may benefit from a dedicated exterior entrance near the ED entrance.

Establishing dedicated paths for behavioral health patients simplifies the implementation of security zones and procedures, reduces the liability and cost associated with maintaining a safe patient environment, and can reduce the disorientation these patients may experience when navigating a complex building environment.

Flow of services. The flow of goods and services through a crisis unit should be limited to those serving the unit, including linen, food, environmental, pharmacy, and laboratory services staff as well as building maintenance staff. The path for these services should be as direct as possible and limit interaction with patient spaces.

Where a crisis unit is co-located or readily accessible to the ED, spaces shared by the two units should be located outside the secure boundary of the BHCU. This arrangement allows ED and support staff to access these spaces without having to pass through the secure boundary, reducing time and security risks associated with frequent transits between security zones.

Environmental Design for Facility Security

Facility security can be supported by an environmental design plan that mitigates risk based on the use of "concentric rings of control and protection." Each concentric ring provides a layer of protection, and the subsequent layers are intended to sequentially deter, deny access to, and slow down possible elopement or intrusion. The outermost layers are supported by the additional inner layers of protection. This methodology comes directly from the IAHSS *Security Design Guidelines for Healthcare Facilities*.[16]

In the behavioral and mental health care environment, these protective layers may be approached in the manner described here.

Property perimeter. The first layer of protection should limit points of entry at the perimeter of the property. The facility perimeter should be defined by fences, landscape, or other barriers. At certain locations, such as in a crowded city block, this may include the building exterior. Facility entry points should be controllable during emergency situations or heightened security levels.

Building perimeter. The second layer of protection consists of the doors, windows, or other openings at the building perimeter.

[16]International Association for Healthcare Security and Safety, *Security Design Guidelines for Healthcare Facilities*, 3rd ed. (Glendale Heights, Ill: IAHSS, 2020).

Protective elements or components may include access control hardware, intrusion detection systems, video surveillance, protective glazing materials, or personnel for control and screening at selected entrances.

Unit perimeter. The third layer of protection is inside the building at the unit level, segregating authorized and unauthorized visitors. Using physical and psychological barriers and hardware, this layer is most frequently applied in areas of higher risk, including emergency treatment areas and behavioral and mental health areas.

Staff-only areas. The fourth layer of protection segregates generally accessible public and patient areas and staff-only areas. Using physical barriers and locking hardware, this layer is most frequently applied to areas that restrict all visitors and limit access to health care facility staff, such as nursing offices, staff locker rooms, storage and distribution locations, and food preparation areas.

Highly sensitive areas. The fifth layer of protection uses physical barriers and locking hardware to further restrict access to highly sensitive areas. This layer is most frequently applied to areas that are limited to vetted and authorized staff, such as medication rooms and narcotic storage spaces and areas housing personal health information. Security design considerations for such spaces should comply with applicable regulatory oversight, standards, and guidelines.[17]

Integrating principles and systems for safety and security early in the design process is a fundamentally sound practice that supports clinical operations and safety for all and is more cost-effective than trying to address these issues as an afterthought.

Operational Considerations

Development of the operational plan for a behavioral health crisis unit is guided by organizational policies and procedures, and the operational goals for individual BHCUs will be specific to the

[17] Ibid.

facility and the needs of its community. In all locations, however, the overarching focus is creation of a therapeutic setting so that "mental health patients [can be] sent to the BHCU, which is quieter, less chaotic, and more suitable for their care."[18]

Simply put, like so many other important initiatives regarding health care delivery, the goal is "making sure patients get the right care, in the right place, at the right time."[19] To achieve this, the operational model for each BHCU must respond to the demographics of its community, strategic projections for patient populations expected in the future, location of the unit, and specific program elements identified during the functional programming process in response to these operational drivers.

One operational model that has emerged in recent years is the emPATH (emergency psychiatric assessment, treatment, and healing) model, which creates "hospital-based outpatient programs which can promptly accept all medically appropriate patients in a psychiatric crisis, even those on involuntary psychiatric detention," as Scott Zeller, MD, explained in an article in *Psychiatry Advisor* in 2017. "Rather than being an alternative-to-inpatient destination for ED behavioral and mental health patients, the emPATH unit is *the* destination for all the ED's acute mental health patients, a place where disposition decisions are typically not made until after a thorough psychiatric evaluation, treatment, and an observation period in the recuperative unit setting."[20]

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[18]Beth Jones Sanborn, "As emergency rooms fail in treating mental health, systems create new plans, centers," *Healthcare Finance*, April 12, 2016, *https://www.healthcarefinancenews.com/news/emergency-rooms-fail-treating-mental-health-health-systems-create-new-treatment-plans*.

[19]F. Ryckman, U. Kotagal, and P. Rutherford, "WIHI: The Right Care, Right Setting, and Right Time of Hospital Flow" (Institute for Healthcare Improvement podcast, March 9, 2017), *https://www.ihi.org/resources/Pages/AudioandVideo/WIHI-Right-Care-Right-Setting-Right-Time-of-Hospital-Flow.aspx*.

[20]Scott Zeller, "emPATH Units as a Solution to ED Psychiatric Patient Boarding," *Psychiatry Advisor* website, September 7, 2017, *https://www.psychiatryadvisor.com/home/practice-management/empath-units-as-a-solution-for-ed-psychiatric-patient-boarding*.

Clinical Operations

The planned capacity of a behavioral health crisis unit should be able to flex to respond to the associated emergency department volume, which is not predictable. The open lounge atmosphere with comfortable chairs typical of a BHCU can support a model of care that allows for such flexible capacity. Other operational matters to consider in planning and designing a BHCU are outlined here.

Staffing. A BHCU provides a safe therapeutic environment in which trained staff provide evaluation and treatment of patients in crisis. Staff can include psychiatrists, nurses, technicians, social workers, peer support specialists, and therapists who provide behavioral and mental health services. Because clinical operations will flow to support the model of care identified for a particular unit, staffing should be considered when designing a BHCU.

Medical screening and intake. In 2017 the CDC's National Hospital Ambulatory Survey noted that 4.8 million visits to the emergency department were for patients with the primary diagnosis of a mental, behavioral, or neurodevelopmental disorder.[21]

Medical evaluation. Patients presenting with a behavioral or mental health emergency may have comorbid medical conditions that can cause or exacerbate behavioral or mental health symptoms. For this reason, a medical evaluation is usually conducted to identify comorbidities and their potential causes. As well, many behavioral and

[21]Centers for Disease Control and Prevention, National Center for Health Statistics, Table 11 (Primary diagnosis at emergency department visits, by major disease category: United States, 2017) in "National Hospital Ambulatory Medical Care Survey: 2017 Emergency Department Summary Tables," *https://www.cdc.gov/nchs/ahcd/web_tables.htm*.

mental health facilities require a "medical clearance" before they will accept transfer of a patient for psychiatric care.[22] The extent of screening and testing varies according to the policies of each facility or health system.

Medical triage and testing often occurs in the main emergency department, which can be a busy, noisy, and disruptive setting for those experiencing a psychiatric emergency. Therefore, transfer as soon as practical to a more therapeutic environment for further assessment and treatment is optimal. In fact, in some locations, triage and testing may take place in the behavioral health crisis unit. This is an important operational distinction for a designer to understand and establish prior to programming and designing a crisis unit so the correct support spaces and adjacencies can be integrated into the project.

Contraband screening. To maintain safety for all patients and staff in a BHCU, provisions for screening patient contraband prior to entrance into the treatment area should be considered. A clear understanding of how and where this process will occur, as well as how the contraband will be managed, should be established to inform a functional design.

Length of stay and treatment. The BHCU is intended to provide a calming supportive environment to support rapid recovery from an acute behavioral and/or mental health emergency. In most cases, patients' length of stay may be 24 hours or less; thus, short-term therapeutics that can be delivered in this timeframe are recommended for this space.

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[22]The term "medical clearance" is misleading. The American Association for Emergency Psychiatry has provided recommendations for medical evaluation of patients with a psychiatric emergency: "Medical evaluation should be conducted with the aim of identifying potential medical etiology and medical comorbidities requiring care but not directly related to the current psychiatric complaint." D. J. Nazarian, J. S. Broder, M. P. Wilson, et al., "Clinical policy: Critical issues in the diagnosis and management of the adult psychiatric patient in the emergency department," *Annals of Emergency Medicine* 69, no. 4 (April 2017);480- 98, *https://doi.org/10.1016/j.annemergmed.2017.01.036*.

Some of the therapies provided may include medications, respite and napping, social engagement, walking, nutrition, small group and recreational therapy, provider engagement, and education. These activities can be delivered in an open setting that has a direct line of sight from the nurse station. This central multiple-patient observation area should accommodate spaces for group and individual therapy. One or more individual consultation rooms may complement the service and care delivery.

Visitor accommodation. If accommodating visitors is a consideration for the unit, it is important to establish a flow and protocol for their entrance and exit and to provide one or more waiting areas for family, caregivers, and case managers. The minimum requirement set forth in the 2022 FGI *Guidelines* is for a visitor lounge that is "readily accessible to the behavioral health care unit."[23] Whether it is preferable to exceed this requirement, which means "on the same floor," for a particular BHCU is an option to be decided by the health care organization.

Discharge. After receiving optimal treatment, most patients seen in a BHCU return to the community. Family may be involved in discussion of the patient's discharge and of the mode of transportation to be used.

If a patient requires additional behavioral and/or mental health treatment, transfer to an inpatient unit in the facility where the BHCU is located or elsewhere may occur. Organizational policy will guide the mode of transportation used in these instances. If the transfer is to an outside facility, medical transport services may provide transportation, in which case a wheelchair or stretcher entrance may be needed.

If a patient becomes medically compromised, the individual may be returned to the main emergency department for additional

[23]Section 2.2-3.2.6 (Support Areas for Families, Patients, and/or Visitors) in *Guidelines for Design and Construction of Hospitals* and Section 2.8-3.5.7.6 (Support areas for families and visitors) in *Guidelines for Design and Construction of Outpatient Facilities*, ;2022 ed. (St. Louis: Facility Guidelines Institute, 2022).

treatment. However, the goal is to avoid return to the main ED for any reason other than serious medical emergencies.

Safety Policies and Procedures

Safety for patients and staff is an integral element in the care of patients experiencing behavioral and mental health emergencies. BHCU staff are trained to recognize and promptly intervene when patients have difficult moments, using calming, verbal de-escalation, engagement, and collaboration techniques, including offering voluntary medications. These methods can help limit the need for more restrictive measures, such as forcible injection of pharmacologic sedation and physical restraint of agitated patients. Coercion is avoided in the crisis unit.[24, 25]

Development of policies and procedures. BHCU staff should work with security management staff to coordinate safety and security measures for the unit, jointly developing unit-specific policies and procedures. At minimum, the following should be included:

- Unit staff are clear on the roles, responsibilities, and assignments for themselves and fellow staff members in the event of a security or safety event (e.g., patient escalation, patient injury, staff injury, patient elopement).[26]
- Unit staff are well-trained and competent in both verbal and nonverbal de-escalation measures and restraint procedures.

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[24]M. P. Wilson, K. Nordstrom, E. L. Anderson, et al., "American Association for Emergency Psychiatry Task Force on Medical Clearance of Adult Psychiatric Patients. Part II: Controversies over medical assessment, and consensus recommendations," *Western Journal of Emergency Medicine* 18, no. 4 (June 2017):640-46, *https://doi.org/10.1016/j.annemergmed.2017.01.036*.

[25]M. P. Wilson and S. L. Zeller, "Introduction: Reconsidering psychiatry in the emergency department," *Journal of Emergency Medicine* 43, no. 5 (November 2012):771-72, *https://doi.org/10.1016/j.annemergmed.2017.01.036*.

[26]The Joint Commission, Standard EC.02.01.01 in the "Environment of Care" chapter, *Comprehensive Accreditation Manual for Hospitals* (Oak Brook, Ill.: Joint Commission Resources, 2022); and Tony York and Don MacAlister, *Hospital and Healthcare Security*, 6th ed. (Elsevier, 2015).

- Unit staff identify all individuals entering the unit per organizational policy.[27]

Policies and procedures should also be developed for staff roles and responsibilities during other emergency conditions (e.g., fire, utility failure, evacuation).[28]

Mitigating violence. Staff safety and security is of paramount importance in a behavioral and mental health care setting, which is underscored by Occupational Safety and Health Administration reports showing that workplace violence is four times more common in health care settings in general than in other industries.

The Security Industry Association Health Care Security Interest Group's paper "Mitigating the Risk of Workplace Violence in Health Care Settings"[29] states that staff "needs to be proactive and attentive to behaviors that may be cause for concern. They need to report threats from patients, coworkers, and others immediately." The paper identifies the following actions staff can take to help curb violence, which can be applied to a behavioral health care unit:

- "*Promoting respect.* Fostering an attitude of respect and consideration can often defuse explosive behavior.
- "*Eliminating potential weapons*. Objects that could be used in an assault should be secured or removed.
- "*Knowing violence response procedures.* [Implementing] proper response techniques during violent incidents can help minimize injuries; all staff should know how to summon assistance and move people out of danger and into safe areas.
- "*Trusting your instincts*. Staff should be trained to listen to their internal warning system if they feel something is wrong.

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[27]The Joint Commission, Standard EC.02.01.01.

[28]Ibid.

[29]SIA Health Care Security Interest Group and International Association for Healthcare Security & Safety Foundation, "Mitigating the Risk of Workplace Violence in Health Care Settings" (Security Industry Association, August 2017), *https://www.securityindustry.org/2017/11/21/mitigating-risk-workplace-violence-health-care-settings*.

- "*Working as a team*. The "buddy system" should be used during a crisis; no [staff member] should be left alone."

Enforcement of workplace violence prevention policies and staff training in how to recognize and respond to violent situations can minimize risks to patients, staff, and others in a BHCU.

Preventing elopement. Every BHCU should have a patient elopement response procedure that is coordinated with the organization's security management policies and procedures. The ability to implement a code call for an organizational response can augment the unit response. A typical such protocol includes:

- Notification of operator via telephone or dedicated alarm system to trigger an organization-wide mass notification
- Notification of security with pertinent patient description and clinical information
- Immediate search of the unit and surrounding area by unit staff
- Immediate search of hospital and grounds by security personnel
- Notification of police as needed by security
- Notification of patient's family per organizational protocol

Practical safety measures integrated into BHCU design and operational practices enable health care organizations to focus on delivering prompt, effective crisis intervention, alleviating patient suffering during their time of need to the greatest extent possible. Not only is this a benefit to the patients; it also yields benefits to the caregivers and the organization.

Reimbursement

Reimbursement models vary by jurisdiction as it is incumbent upon individual states to allocate Medicaid funds and block grants to support behavioral and mental health treatment programs. As stated in the article "Boarding of Mentally Ill Patients in Emergency Departments: American Psychiatric Association Resource

Document" in the September 2019 issue of *Western Journal of Emergency Medicine*, "Efforts need to focus on improved access to care through funding gaps identified in the analysis of boarding cases. This funding should increase the breadth of alternatives to EDs for crisis treatment such as mobile crisis units, crisis stabilization units, 24-hour walk-in clinics, and short-term residential facilities.... Improved reimbursement for care with a focus on parity for mental illness, substance use disorders, and intellectual and developmental disorders will be critical."[30]

Directing these vital funding sources to facilities serving patients in behavioral health crisis, including BHCUs, is essential to realizing the improvements to patient care that can be achieved in these facilities. At the same time, funding for one type of program should not come at the expense of funding for other types of crisis response services. The availability of a variety of programs that are typically complementary across levels of acuity and comorbid medical and substance abuse-related issues is important as one program cannot meet all a community's needs.

Improved Patient Care and ED Throughput

The number of individuals in behavioral and mental health crisis who present to hospital emergency departments has risen dramatically nationwide, a situation recognized by health care organizations, communities, local law enforcement agencies, and health care regulators. This increased demand fuels ED capacity issues because individuals in mental health crisis often spend much longer in the ED than other patients, including time-consuming searches for a facility to which the patient in crisis can be transferred. As a result, these patients have often become unintended boarders, filling ED

[30]K. Nordstrom, J.S. Berlin, S. S. Nash, et al., "Boarding of mentally ill patients in emergency departments: American Psychiatric Association resource document," *Western Journal of Emergency Medicine* 20, no. 5 (September 2019):690-95, *https://doi.org/10.5811%2Fwestjem.2019.6.42422*.

beds and overflowing into hallways on gurneys—an environment that exacerbates their conditions. A more effective care solution for hospitals is to quickly move these patients to an appropriate location for immediate treatment, such as a behavioral health care unit.

Many behavioral and mental health emergencies are similar to traditional medical emergencies in that the mental health crisis can be effectively addressed immediately by treating a patient in an appropriate environment, which for patients in behavioral health crisis is one that facilitates stabilization and healing. Competent provision of appropriate care often leads to timely discharge of patients with a follow-up care coordination plan. The literature documents that three-fourths of high-acuity behavioral and mental health patients involuntarily admitted to a behavioral health care unit recover and can be discharged in less than 24 hours, allowing them to go home rather than remaining locked in a hospital bed. With these results, the dedicated behavioral and mental health crisis unit is proving to be an effective solution for improved care delivery, better patient outcomes, efficient operational performance, and positive financial performance.

Factors to Keep in Mind When Considering Creation of a BHCU

- Evaluate your specific situation, including available space in the facility, the daily census of behavioral health patients in the ED, staffing needs and availability, potential funding sources, and state/regional/local regulations.
- Understand the status of reimbursements for emergent behavioral and mental health care in your state and geographic area.
- Assess whether an in-system solution is fitting or a solution shared by different health care systems is more appropriate.
- Consult the state hospital licensing authority when assessing a shared care solution.
- Bring together a multidisciplinary group from inside and outside your health system to help assess the need for behavioral health crisis care and to assist with design of the physical environment and operational processes that can address the need.

Independent solutions for providing emergency care and mitigating boarding of behavioral and mental health patients in EDs are being built across our nation, but until now there has been no industry standard to guide providers, designers, builders, and regulators in their development. Recognizing the value a behavioral health crisis unit provides to patients, the Facility Guidelines Institute has vetted minimum standards and supplemental guidance for the design and construction of these units. This information appears in the 2022 edition of the FGI Hospital and Outpatient *Guidelines for Design and Construction*

documents. This paper provides additional in-depth information to help foster an understanding of the intent and nature of BHCUs and their potential for effective care of behavioral and mental health patients in need.

Resources

The resources listed here are intended to supplement the information in this paper and in the FGI *Guidelines*.

Committee on Psychiatry and the Community for the Group for the Advancement of Psychiatry, *Roadmap to the Ideal Crisis System: Essential Elements, Measurable Standards and Best Practices for Behavioral Health Crisis Response* (National Council for Mental Wellbeing, March 2021), *https://www.thenationalcouncil.org/resources/roadmap-to-the-ideal-crisis-system*.

McMurray, K.; J. Hunt; and D. Sine. *Behavioral Health Design Guide* (Behavioral Health Facility Consulting, November 2020). *https://www.bhfcllc.com/design-guide*.

New York State Office of Mental Health. "Patient Safety Standards, Materials and Systems Guidelines," 27th ed. (NYS-OMH, January 31, 2022). *https://omh.ny.gov/omhweb/patient_safety_standards*.

Stamy, C.; D. M. Shane; L. Kannedy; et al. "Economic Evaluation of the Emergency Department After Implementation of an Emergency Psychiatric Assessment, Treatment, and Healing Unit." *Academic Emergency Medicine* 28, no. 1 (January 2021):82-91. *https://doi.org/10.1111/acem.14118*.

Zeller, S., and S. Thomas. "The Myriad Components of Creating a Comprehensive Patient Safety System." *The Joint Commission Journal on Quality and Patient Safety* 47, no. 1 (January 2021):3-4. *https://doi.org/10.1016/j.jcjq.2020.10.002*.

U.S. Department of Veterans Affairs. *Design Guide for Inpatient Mental Health & Residential Rehabilitation Treatment Program Facilities* (VA: January 2021). *https://www.cfm.va.gov/TIL/dguide/dgmh.pdf*.

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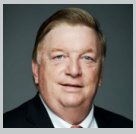

Edward M. Browne, MS, CHFM, CHC, CHPA, CLSS-HC, CEPSS-HC, FASHE, LFACHE, is a health care accreditation consultant for Joint Commission Resources with more than 35 years of experience as an engineer and facility manager. Ed recently retired from the Cambridge Health Alliance, where he served as vice president, support services. As a representative of the IAHSS Affiliations Council, he served on the 2022 FGI Health Guidelines Revision Committee, the 2022 *Guidelines* Benefit-Cost Committee, and the FGI Behavioral Health and Behavioral Health Crisis Unit topic groups.

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FGI

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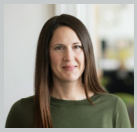

Sara Wengert, AIA, ASID, has served as principal in charge and lead interior designer for numerous mental health projects. As a principal at architecture+, she manages and continuously maintains the *Patient Safety Standards* published by the New York State Office of Mental Health, a guideline used in planning psychiatric facilities throughout North America. She was a member of the FGI 2022 Behavioral Health Crisis Unit topic group.

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