Built Environment Considerations for Patients with Behavioral & Mental Health Conditions

Presented by Grainger and The Center for Health Design
The Center for Health Design
The Center’s mission is to transform environments for a healthier, safer world through design research, education, and advocacy.

Image: Adelante Mesa

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Learning Objectives

1. Identify some of the behavioral and mental health conditions that can put patients and staff at risk.
2. Outline specific areas of concern for accreditation surveys.
3. Describe specific features that improve safety, security, and health outcomes.
4. Explain options for using universal design to promote psychological wellness for all populations all the time.
Course Outline

1. Behavioral and Mental Health Conditions
2. Accreditation Concerns
3. Security and Safety in The Built Environment
4. Universal Design-Design that is safe for all populations
It's a System

ENVIRONMENT
Does design become a barrier to tasks and activity (think workarounds)?
How can design facilitate the work flow and desired behavior?
What design conditions might lead to harm (e.g., layouts, flooring)?

PEOPLE
What are the patient demographics?
What are the capabilities & limitations of patients and staff?
How do individual needs to be supported?

OPERATIONS
What is the real work being performed?
What policies and procedures that need to be considered?
Are there new policies that need to be put in place?
Do staff understand new workflows in the environment?

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It takes a village…

…and a multidisciplinary team!
And a risk assessment...
Behavioral & Mental Health Conditions
Behavioral and Mental Health Conditions

• How many attendees have dedicated behavioral health units?

• How many attendees have or will have patients in their facilities with behavioral health conditions?
Behavioral and Mental Health Conditions

- Anxiety disorders
- Attention deficit disorder
- **Autism spectrum disorders**
- Depression
- **Dementia**
- Eating disorders
- Substance abuse
- Obsessive-compulsive disorder
- Personality disorders
- Suicidal behavior
- Post-traumatic stress disorders
- Post-partum depression

Photo by Fernando @cferdo on Unsplash

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1 in 5 Adults

Are affected by behavioral and mental health (behavioral and mental health) conditions each year.
Adults with a Mental Illness

- Treatment: 44%
- No treatment: 56%

Mental Health America, 2016, 2018
Almost 80% Adolescents with depression go without treatment

Photo by Sharon McCutcheon on Unsplash
Up to 45% of patients admitted to the hospital will also have a behavioral and mental health condition. This increases the risk of psychological harm associated with care.
Behavioral and mental health conditions are lumped together as a single diagnosis.
Pop Quiz! Choose the correct answer:

What percentage of patients admitted to the hospital also have a behavioral or mental health condition?

a. Almost none  
b. Almost all  
c. Almost half
The Focus on Safety (L) (epidemic)

Solutions for an entire healthcare facility must be implemented to ensure physical safety.

Guidelines:
NY state office etc…
- 
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An Overview of Accreditation Concerns
Regulatory Focus on Behavioral Health

In this issue:

CMS drafting guidance on ligature and other self-harm risks
Coming soon: Three-bayroom-Callable Stroka Center Advanced Certification available Jan. 1
Nominations being accepted until Oct. 31 for John M. Eisenberg Awards
September JUPS: Study concludes no consensus on what makes high performing HCOs
New Take 5 podcast focuses on importance of daily safety briefings

Accreditation and certification

CMS drafting guidance on ligature and other self-harm risks
The Centers for Medicare and Medicaid Services (CMS) recently identified the need for increased direction, clarity and guidance regarding the definition of what constitutes a ligature risk, as well as other safety risks involved in the care of patients requiring psychiatric care and treatment. Included in this guidance will be direction on:
- How these risks should be surveyed
- At what level the deficiency should be cited
- The elements required for an appropriate Plan of Correction
- What constitutes a suitable mitigation plan to minimize the risks to patients who are cared for in environments with identified deficiencies

CMS stated that the focus of its concern is on psychiatric patients in psychiatric units of hospitals and in psychiatric hospitals. CMS is drafting guidance utilizing the expertise of CMS regional offices, state survey agencies, accrediting bodies, providers, mental health clinicians, and other stakeholders. CMS expects this guidance to take approximately six months to complete.

In the meantime, CMS has stated that the Joint Commission may use its judgment as to the identification of ligature and safety risk deficiencies, the level of severity for those deficiencies, as well as the approval of the facility’s corrective action and mitigation plans to remedy the identified deficiencies.

While the guidance is being developed, CMS will review its enforcement actions related to serious ligature risk deficiencies on a case-by-case basis, and will provide updates via Survey & Certification (S&C) policy memos, as necessary.
March, 2017: “Effective immediately, The Joint Commission will place added emphasis on the assessment of ligature, suicide and self harm observations in psychiatric hospitals and inpatient psychiatric patient areas in general hospitals…”
Ligature Resistant vs. Ligature-free

The (Joint Commission expert) panel recommended the term ‘ligature-resistant’ rather than ligature-free’

The panel adopted this definition of ligature resistant for the physical environment:

‘Without points where a cord, rope, bedsheets, or other fabric/material can be looped or tied to create a sustainable point of attachment that may result in self-harm or loss of life.’

Special Report: Suicide Prevention in Health Care Settings; The Official Newsletter of The Joint Commission; November 2017, Volume 37, Number 11
Ligature risks—even at floor height!

- Trees, fencing, gazebos, covered walkways, gutters and downspouts
- Suspended ceilings, maintenance access hatches and panels,
- Doors, door hinges, door handles,
- Ceiling fixtures
- Curtain tracks
- Windows - the handles, opening restrictors, and locks.
- Plumbing


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Even ligatures at floor height pose a risk...
Dedicated Behavioral Health (locked units)

- Inpatient psychiatric hospitals
- Inpatient psychiatric units in general acute care hospitals

*The Joint Commission, 2017*
Inpatient Psychiatric Units (locked units)

- Must be ligature-resistant:
  - Patient Room, Patient Bathrooms, Corridors*, & Common Patient Care Areas*
- Solid ceilings for patient rooms and bathrooms
- *Drop ceilings can be used in hallways and common areas if fully visible to staff and free of objects that could be used for climbing
- Likely that drop ceilings will need to be clipped down in the near future
Inpatient Psychiatric Units

- Over-the-door alarms not mandated
- Nursing stations - Unobstructed view/clear line of sight
- Areas protected by self-closing/self-locking doors do not need to be ligature resistant (staff spaces, med rooms, etc.)
- Documentation of policies, procedures, and training is required and is checked by the surveyor
Patients with behavioral health conditions may need care in:

- Emergency rooms
- Medical inpatient units
- ICU
- Labor and delivery
- Etc.

*The Joint Commission, 2017*
Non-Behavioral Health Spaces

- Risk assessment to identify ligature/self-harm
- All physical risks that are not required for treatment must be removed
- An appropriate level of surveillance must be implemented if physical environment risks remain
- Documentation of policies, procedures, and training is required and is checked by the surveyor
Safe Rooms (Preferred Spaces)

- Safe rooms are not required
- Must be as ligature resistant as clinically possible
- May use hinged stainless steel or pull down door to cover critical utilities
- 1:1 continuous observation is required if there are any remaining risks such as equipment
- Documentation of policies, procedures, and training is required and is checked by the surveyor

*The Joint Commission, 2017*
Assess Ligature Risks (ED and Acute Care)

Step 1: Identify patients at risk for intentional harm to self or others.
Step 2: Observe by providing 1:1 monitoring with continuous visual observation.
Step 3: Remove and clinically mitigate all environmental safety risks where 1:1 monitoring with continuous observation is not feasible.

*These steps do not apply to psychiatric units.

www.ashe.org/patientsafety
Designated Behavioral Health:

Inpatient psychiatric hospitals, inpatient psychiatric units in general acute care hospitals,

EDs with preferred rooms and EDs with designated space and non-behavioral health units DESIGNATED for the treatment of psychiatric patients (i.e. special rooms/safe rooms in Emergency Departments or Medical Units)
Non BH Settings

- Medical/surgical inpatient setting does not need to meet the same standards as an inpatient psychiatric unit
  - Fixed ligature risks will not be cited on survey in these areas
- EDs do not need to meet the same standards as an inpatient psychiatric unit
  - Fixed ligature risks will not be cited on survey
  - Consider a designated “safe room” - ligature resistant
Pop Quiz! True or False?

The requirements are the same for dedicated and non-dedicated behavioral health areas of a hospital.

FALSE
Pop Quiz! True or False?

Scoring by accrediting organizations only considers ligatures in the environment. **FALSE**
DNV-GL expects to receive approval from CMS in early 2020 to begin accrediting psychiatric hospitals
Security & Safety in The Built Environment
Built Environment Challenges

A range of conditions
A range of environments

Consider safety for behavioral and mental health - all the time, every space.


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Notable Risks

• Suicide
• Self-harm
• Violence
• Elopement
• Vandalism
• Unauthorized access to hazardous items
Site Design: Security & Visibility

- Secure perimeter
- Visual access for staff to outdoors (parking garage)
- Landscaping:
  - Reduces risk of access to roofs, fences, or walls
  - Non-toxic,
  - Prevent use as a weapon (e.g. branches)
Facade: Secured Access & Other Hazards

- Secure private staff entries
- Window safety issues:
  - Ligature point
  - Location for jumping,
  - A method of escape,
  - A place to push others into harm
  - A weapon if glass is broken
Direct Lines of Sight

- Direct lines of sight
- Mirrors
- Windows
- Camera surveillance (to support not replace observation)
- Qualified staff must be able to intervene

https://pixabay.com/p-1831391/?no_redirect
Seattle Children’s Hospital, ZGF Architects
Patient Room: Occupancy - Private or Shared?

- Shared rooms can cause distress…or…
- Shared rooms can provide another set of eyes
- Decisions about room occupancy should be based on patient diagnosis and acuity
- RISK Assessment!
Open or Closed Nurse Stations

- Safety?
- Communication barrier?
- Patient population
- Acuity
- RISK Assessment!

Brandywine Behavioral Health Pavilion; BKT Architects
Door and Locks: Multiple

- Barricading
- Door swings
- Unauthorized access
- Need for staff access
- Patient elopement

Photo https://www.maxpixel.net

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Door Considerations in Dedicated BH

- Barricading risks
- Door swings should be in both directions
- Self-closing/self-locking doors to prevent unauthorized access
- Doors to prevent patient elopement, but must meet special LSC provisions
Doors and door locking are often referenced as a location for hanging – especially toilet room doors.
Soft Doors

- Ligature-resistant.
- Calming imagery provides a positive distraction.
Ligature-resistant bathrooms

- Faucets
- Fixtures
- Drain pipes
- Flush valves
- Bed pan washers
- Grab bars
- Toilet paper holders
- Toilet seats
  - (bolted or standard?)

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Interiors: Other Hazards, Ligatures

- Finishes
  - Toxicity
  - Paint chips
- Walls
  - Impact resistance
- Ceilings
Interiors: Other Hazards

- Furniture can be used as a ligature, a barricade, or a weapon
- Mirrors & Art – Glass can be used for self harm or as a weapon
Furniture – Beds

• Utilize the risk assessment to determine the optimal type of patient bed to meet both medical and psychiatric needs.
Pop Quiz! True or False?

If we can design all the ligatures out, we have solved the problem.

FALSE
Universal Design
Design environments to be usable by all people, *at every changing level of need*, to the greatest extent possible, without the need for adaptation or specialized design.

Piatkowski & Taylor, 2016
Design features that experts suggest using for behavioral and mental health units may be applied to a universal design to support the psychological well-being and safety for staff and patients.
Non-Institutional Furniture

Create a deinstitutionalized environment to support patient dignity, autonomy and control.

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Finishes Support A Well-Maintained and Well-Organized Environment

Provides clarity for patients and residents.

Akron Children’s Hospital Kay Jewelers Pavilion, HKS, Inc.

Developed with THE CENTER FOR HEALTH DESIGN®
Acoustics

Noise Control
Reduce stress for everyone.

Photo by rawpixel on Unsplash

Developed with THE CENTER FOR HEALTH DESIGN®
Daylight and Lighting

Windows
Reduce depression and support recovery

Vista II (Stance)

Developed with THE CENTER FOR HEALTH DESIGN®
Positive Distractions

Improve well-being through nature, art, natural light.
Pop Quiz! True or False?

The ideal physical environment for recovery from mental health illness is fully understood.
Pop Quiz! True or False?

Research suggests that stress reducing design features can help mitigate aggressive behavior.
Tools and Resources
Safety Risk Assessment Tool

WHAT is the SRA?

The Safety Risk Assessment (SRA) Toolkit is:
- a proactive process that can mitigate risk
- a discussion prompt for a multidisciplinary team
- an evidence-based design (EBD) approach to identify solutions.

The SRA targets six areas of safety (infections, falls, medication errors, security, injuries of behavioral health, and patient handling) as required in the FGI Guidelines.

https://www.healthdesign.org/sra
### BEHAVIORAL HEALTH - B5

Design exterior landscaping to allow visibility and surveillance by staff where patients have outdoor access.

**IS THIS CONSIDERATION APPLICABLE TO THIS ASSESSMENT?**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Needs Review</th>
</tr>
</thead>
</table>

**BACKGROUND INFO**

- **DESIGN CATEGORY:** Site Optimization
- **GENERIC RISK ESTIMATE:** Med-High
- **LOCATION/UNIT:** General Consideration
- **EVIDENCE SOURCE:** Consensus

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### BEHAVIORAL HEALTH - B6

Select non-toxic exterior and interior landscaping to preclude use as a weapon (e.g., branches).

**IS THIS CONSIDERATION APPLICABLE TO THIS ASSESSMENT?**

<table>
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**BACKGROUND INFO**

- **DESIGN CATEGORY:** Site Optimization
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- **LOCATION/UNIT:** General Consideration
Sponsored Toolboxes at healthdesign.org

The Safety Toolbox offers more than 35 resources

The Behavioral Health Toolbox offers more than 15 resources

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Resources from ASHE

- Ligature Risk Interpretive Guidelines
- 2019 Just Ask ASHE High Risk Video Monitoring
- ASHE Patient Safety and Ligature Identification Checklist
- A Safe Healthcare Environment
- Virtual Rounding Tools
- Joint Commission Expert Panel Recommendations
- My ASHE Q&A

www.ashe.org/patientsafety
Virtual Rounding Tool-ASHE

Developed with The Center for Health Design®
### Patient Safety and Ligature Identification Checklist:
For Ligature Resistant Emergency Room

<table>
<thead>
<tr>
<th>Item</th>
<th>Evaluated</th>
<th>Issue</th>
<th>Guidance</th>
<th>Mitigation Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseboards</td>
<td></td>
<td>Can be used for self-harm or as a weapon</td>
<td>Should be inspected to assure they are properly adhered.</td>
<td></td>
</tr>
<tr>
<td>Bed</td>
<td></td>
<td>Can be used as an anchor point, for self-harm, or as a weapon</td>
<td>Bed should be inspected and hazards to behavioral health patients by bed rails, headboard, and footboard should be considered.</td>
<td></td>
</tr>
<tr>
<td>Exam Light</td>
<td></td>
<td>Can be used for self-harm or as a weapon</td>
<td>Ceiling mounted lights should be secured away from patient. Mobile exam lights should be relocated.</td>
<td></td>
</tr>
<tr>
<td>Curtain cubical track</td>
<td></td>
<td>Can be used as an anchor point, for self-harm, or as a weapon</td>
<td>If not properly designed, track can have multiple anchor points. If damaged, parts can be used as a weapon.</td>
<td></td>
</tr>
<tr>
<td>Curtain rods</td>
<td></td>
<td>Can be used as an anchor point, for self-harm, or as a weapon</td>
<td>Non-institutional devices can be used as an anchor point. If damaged, these can be used as a weapon.</td>
<td></td>
</tr>
<tr>
<td>Medical gas outlets</td>
<td></td>
<td>Can be used as an anchor point and devices plugged into outlets can be used for self-harm or as a weapon</td>
<td>Should be free from protruding edges and exposed corners. If tamper resistant screws are not used, they could be removed and used as a weapon. Detachable devices can be removed and used as a weapon.</td>
<td></td>
</tr>
<tr>
<td>Nurse call pull cord</td>
<td></td>
<td>Cord can be used as a choking device or as a weapon</td>
<td>Should be inspected to assure the cord is not unduly long (approximately 4&quot; of usable cord) and should be lightweight.</td>
<td></td>
</tr>
</tbody>
</table>
Resources from FGI Guidelines

www.fgiguidelines.org/beyond-fundamentals/beyond-fundamentals-library/#
Resources from FGI

Edition 8.1 (June, 2019)
www.bhfcllc.com/design-guide/


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Behavioral Health Resources & Services

BEHAVIORAL HEALTH SOLUTIONS
Count on us to help maintain patient and staff safety:
- Behavioral Health
- Physical Environment
- Risk Assessment
- Product/Material
- Installation & Project Management


- Product Selection Guide
- Safety Risk Assessments
- Installation Services
- Edit this slide
- Grainger can present this session to your EOC team
- Grainger can provide a BH product selection guide that will assist with meeting non-ligature requirements
- Grainger can participate in the risk assessment process
3 respected sources compiled into 1 guide
Questions
Thank You!

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Endnotes: BMH Safety Brief


Additional References


