

ECN News

Environment of Care | Emergency Management | Life Safety

Protecting Patients from Self-Harm

Reducing the risks of suicide in a behavioral health care unit or facility requires careful planning and diligence

Hospitals, clinics, and other health care facilities are rightly considered safe spaces and healing habitats. But for many troubled patients intent on inflicting self-harm, these environments—and even the most common and benign objects in them, from cabinet drawers to door-knobs—can be used in a deadly manner.

Indeed, suicide in inpatient settings is an increasingly serious concern. The American Psychiatric Association has estimated that approximately 1,500 suicides occur each year in these settings.¹ And suicide has been among the top four most frequently reviewed sentinel event categories over the past several years,² with 775 suicide events reviewed by The Joint Commission between 2004 and 2013.³

Health care organizations, especially those treating behavioral health care inpatients, can decrease the likelihood of these incidents by taking a patient-centric view, conducting a safety risk assessment, evaluating the impact of these hazards, developing controls and making decisions, implementing controls and eliminating hazards, and evaluating the effectiveness of controls and continually conducting risk management.

“Behavioral health care patients are one of our most vulnerable populations. Health care leaders and professionals must ensure that the environment of care for these patients prevents self-harm,” says Dodd M. Day, MAS, CSP, CHSP, CPP, a Dallas-

(continued on page 3)



The care environment should be designed to help prevent suicidal patients from harming themselves.

Protecting Patients from Self-Harm
(continued from page 1)

based *Life Safety Code*^{®*} surveyor for The Joint Commission.

Spotting trouble

Protecting patients requires carefully assessing the environment of care for and eliminating potential suicide hazards. Seventy-five percent of inpatient suicides involve hanging (typically in the patient’s room), and another 20% involve

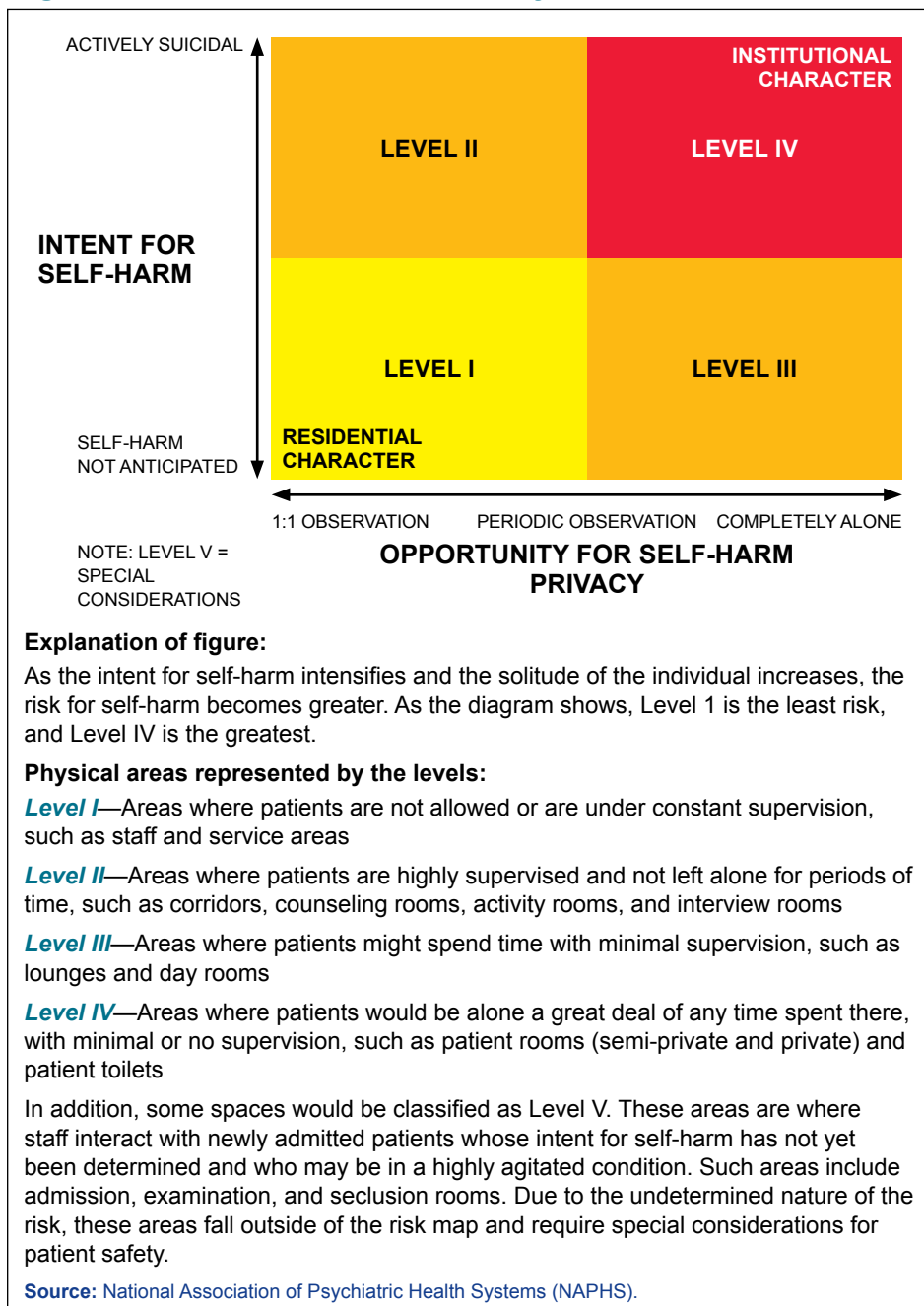
patients jumping from a roof or window.⁴ One study found that 41% of inpatient hangings involved cabinet doors or drawers used as attachment points for a ligature.⁵

These data have compelled facilities to reduce points of attachment (to prevent hangings) and make units more resistant to elopement by implementing measures like impact-resistant windows and limiting the size of the opening in operable windows.

Objects, materials, and areas that can increase the risk of patient suicide (especially hangings) include the following:

- The pinch point at the top of tight-fitting doors
- Interior door and window overhangs
- Lighted exit signs not installed tight to the ceiling
- Corridor wall and patient wall projections
- Medical bed headboards and footboards
- Door and cabinet hinges and hardware
- Patient bathrooms, including plumbing under toilets and sinks, shower curtains and rods, shower seats, handrails, and door frames
- Patient-accessible hazardous drugs and chemicals in a patient’s room or on a housekeeping cart.[†]

Figure 1. Hunt/Sine Patient Safety Risk Assessment



Blueprint for safety

Day says the most effective way to safeguard behavioral health care patients is to adopt a safety management system approach using a proven risk management model.

“We should never take chances with patient safety. But we’re taking a chance when we accept risk without conducting and documenting a formal risk management process. This is why it’s so important to use a safety management system that includes a proactive or predictive risk management process—not a reactive process,” says Day.

Day adds that many hospitals have developed written protocols for conducting risk management to help assure that hazards are identified and self-harm risks are appropriately managed in the behavioral health care environment.

Whatever risk management process is chosen, it should incorporate the follow-

* *Life Safety Code*[®] is a registered trademark of the National Fire Protection Association, Quincy, MA.

† This risk does not pertain to hangings.

(continued on page 4)

ing key principles:

- Integrate risk management into all phases of the organization's mission and operations.
- Make risk decisions at the appropriate level of organization leadership.
- Accept no unnecessary risk.
- Apply risk management continually.

Six-point shield

To manage risks according to these principles, a multidisciplinary team should be assembled that includes at least environment of care/safety committee members, behavioral health care unit clinical experts, and the facility's director and safety officer. This team should complete the following six important action steps:

1. Take a patient-centric view of the environment of care to gain a better understanding of the patient population being served. "The patient population is constantly changing and is quite ductile," says David M. Sine, DrBE, CSP, ARM, CPHRM, chief risk officer for the US Veterans Health Administration Office of Quality, Safety, and Value. "Ask any clinician if the patient population they are treating today is the same as the patient population they were treating five years ago, and you'll get a feel for what I mean. The built environment, on the other hand, is comparatively static and nondynamic. Rather than a room's function primarily driving design choices, the design should now be driven by the patient's need for care in a suitable and safe environment."

2. Conduct a patient-centric safety risk assessment involving initial and periodic inventories of all hazards in the behavioral health care facility's/unit's physical environment. This assessment is required when designing/constructing health care facilities, per the 2014 guidelines published by the Facility Guidelines Institute.^{6*}

Risk Assessment Checklist

The following is an example of a checklist that health care facilities can use to reduce their risks of suicide:

- Avoid "lay-in" ceilings. These can make it easier for the patient to hide contraband, provide a convenient place to secure a ligature for self-harm, and may allow the patient access to above-the-ceiling interstitial spaces.
- If the outside window of the room is operable, limit the opening so a person could not pass through (4 inches is considered the architectural standard of care). Alternatively, consider protecting a window with a security screen that is secured by a device that would require a special tool to remove it from the inside (such as a non-common screw head).
- Make window glazing shatterproof even if the room is on the first floor.
- Use a tamper-resistant, anti-ligature-design door knob for the patient's room.
- If a hospital bed is used, secure the electrical power cord on the bed. Consider replacing the bed cord with a "jumper cord" that can be removed by staff, kept in a secure place, and used only when the bed needs to be adjusted. (Check the bed design to ensure that the bed can be mechanically lowered to a cardiopulmonary [CPR] position.)
- Use tamper-resistant screws throughout the room.
- Secure the power cord on the TV. Mounting brackets can be an attachment point for a ligature, and organizations should be aware of this.
- Replace cork bulletin boards with dry-erase boards to eliminate inadvertent use of thumbtacks.
- Use shatterproof and tamper-resistant glass in night lights and other lighting fixtures.
- Secure light fixtures to restrict patients' access to bulbs and sockets.
- Remove grab bars in the bathroom or fill in the wall gap.
- Eliminate coat hooks, towel bars, cubicle curtain tracks, and closet poles
- Ensure that all electrical outlets are GFCI (ground fault circuit interrupter) and tamper resistant.
- Replace metal outlet covers with shatterproof nonconductive covers.
- Protect the toilet and lavatory pipes.
- Use tamper-resistant lavatory faucets.
- Ensure that HVAC (heating, ventilating, and air-conditioning) grills are tamper resistant.
- Use tamper-resistant shower controls and shower head.
- Ensure the use of shatterproof mirror and picture glazing material, such as polycarbonate.

Source: Adapted from Sine D: Latent risks in the built environment for the behavioral health patient: Concerns for the healthcare risk manager. In *The American Society of Healthcare Risk Management (ASHRM) Handbook*, 6th ed. Volume 2, Appendix 14.1, pp. 459–460. Chicago: American Hospital Association, 2011. © Used with permission of American Society for Healthcare Risk Management.

"These assessments will compel all members of the design team, including clinicians, engineers, and architects, to take a good look at and have a full understanding of the patient population being served," says Sine. "Designers and clinicians today walk a balance between a desired residential look and feel for treatment units and, on the other end of the scale, a

very institutional-looking facility that many do not consider to be a healing environment. That is why conducting a patient-centered risk assessment is such an important step in finding where along that continuum you want to be for the safety and benefit of your patients."

* Note that The Joint Commission still references the 2010 *Guidelines*.

Setting High Standards

When creating and implementing a suicide-prevention risk management plan, the following Joint Commission Environment of Care standards and elements of performance (EPs) can be helpful:

- **EC.02.01.01, EPs 1 and 3**—The hospital: identifies safety and security risks associated with the environment of care that could affect patients, staff, and other people coming to the hospital's facilities; and takes action to minimize or eliminate identified safety and security risks in the physical environment.
- **EC.02.06.01, EP 1**—Interior spaces meet the needs of the patient population and are safe and suitable to the care, treatment, and services provided.
- **EC.04.01.01, EPs 12 and 14**—The hospital: conducts environmental tours every six months in patient care areas to evaluate the effectiveness of previously implemented activities intended to minimize or eliminate risks in the environment; and uses its tours to identify environmental deficiencies, hazards, and unsafe practices.

3. Assess the impact of these hazards and present them as a combined expression of probability and severity.

A patient safety risk assessment tool can be used to help determine the risk classification for the hazards (see Figure 1, page 3).

4. Develop controls and make decisions.

Immediately correct high-risk conditions when possible, submit work orders for medium-risk conditions, and plan capital budget expenditures when time permits.

5. Implement controls and eliminate hazards whenever possible.

“Accept no unnecessary risks. Risk should be reduced to an acceptable level via substitution, engineering and administrative controls, staff training, written SOPs, and related strategies.

When residual risk exists, hospital leadership should always be involved in the decision to accept risk,” says Day, who adds that staff should be trained and reminded to report any hazards immediately.

- 6. Evaluate the effectiveness of controls and continually conduct risk management.** Share the outcomes and lessons learned with the environment of care, safety, and quality committees and organization leadership.

“Rather than a room’s function driving design choices, the design should now be driven by the patient’s need for care in a suitable and safe environment.”*

—David M. Sine, DrBE, CSP, ARM, CPHRM, chief risk officer, US Veterans Health Administration Office of Quality, Safety, and Value

Catalog for safekeeping

An important document that many health care organizations and behavioral health care units in particular refer to when creating a risk management process and when building or renovating their facilities is the National Association of Psychiatric Health Systems’s *Design Guide for the Built Environment of Behavioral Health Facilities*.⁷ This guide describes a design philosophy and features a variety of cutting-edge anti-suicide products, such as these:

- Soft suicide-resistant doors, attached by magnets
- Top door alarms
- Suicide-resistant shelves
- Suicide-resistant TV enclosures
- Suicide-resistant patient sink faucets
- Suicide-deterrent HVAC grilles.

“Ten years ago, very few behavioral health hardware products existed. But



Even door handles can provide an attachment point for a ligature.

today, there are specialty hinges, doors, sprinkler heads, and furniture,” says Sine, who strongly recommends that facility managers and engineers become familiar with what is currently available in the *Design Guide* and the marketplace.

“However, all products should be considered ‘suicide resistant’ and never ‘suicide proof,’ as no matter how well designed a unit or device is it will never be 100% safe,” Sine says.

Treating suicide seriously

Sine says suicide isn’t necessarily more prevalent or more of a risk in health care facilities today than previously; instead, improved reporting systems and patient safety data allow us to build better data sets that give greater insight into rates and causes that we did not have a decade ago.

“The Joint Commission’s heightened focus on patient suicide in recent years has brought the issue to light in a manner that leads us to positive improvements in intake, treatment, and the design of the environment of care,” Sine says.

Despite these improvements, “any suicide of a patient in our care will

* The opinions in this article are those of the quoted source and are not intended to represent the position of the Department of Veterans Affairs or the US government.


(continued on page 11)

Protecting Patients from Self-Harm

(continued from page 5)

always be a tragedy and devastating for all, including the staff of the treatment facility,” says Sine.

Day agrees.

“If a patient comes to a facility seeking treatment and is allowed to harm themselves, the entire health care system has failed,” says Day. “We have a charter to make the behavioral health care setting one of high reliability with a commitment to zero harm.” 

References

1. American Psychiatric Association. Practice Guideline for the Assessment and Treatment of Patients with Suicidal Behaviors. *Am J Psychiatry* 2004 Nov; 160(11):1-60.
2. The Joint Commission. Sentinel Event Data General Information: 1995–2Q 2014. 2004 Nov; 160(11):1-60. Accessed Apr 15, 2015. http://www.jointcommission.org/assets/1/18/General_Information_1995-2Q_2014.pdf.
3. Joint Commission. Sentinel Event Data Root Causes by Event Type: 2004–2013. Accessed Apr 15, 2015. http://www.jointcommission.org/assets/1/18/Root_Causes_by_Event_Type_2004-2Q2013.pdf.
4. Hunt JM, Sine DM. *Converting Medical/Surgical Units for Safety Use by Psychiatric Patients: The Physical and Fiscal Risks*. Chicago: American Society for Healthcare Engineering, 2011.
5. US Department of Health and Human Services. Mental Health: A Report of the Surgeon General. Accessed Apr 15, 2015. <http://profiles.nlm.nih.gov/ps/access/NNBBHS.pdf>.
6. Facilities Guidelines Institute. FGI Guidelines Update Series: What’s New for 2014. Accessed Apr 15, 2015. <http://fgiguidelines.org/2014/articles>.
7. Hunt J, Sine D. Design Guide for the Built Environment of Behavioral Health Facilities. Edition 6.2. Accessed Apr 15, 2015. <https://www.naphs.org/quality/design-guide-for-the-built-environment>.

The opinions in this article are those of the quoted source and are not intended to represent the position of the Department of Veterans Affairs or the US government.