

Patient Safety Tip of the Week

September 18, 2018 More on Hospital Suicides

Suicide in hospitals has been a frequent topic in our Patient Safety Tips of the Week. Since our last column on this topic, there have been several published cases with lessons learned plus a timely review of the prevalence of hospital suicides.

There has been some debate over the prevalence of hospital suicides in the past. The Joint Commission, in its [Sentinel Event Summary Statistics](#), has noted hospital suicides have remained relatively stable at an average of about 90 per year (range 84-98) from 2014 to 2017. But, since not all hospitals have reported completely to the Joint Commission, those figures are likely an underestimate.

Now, a recent study ([Williams 2018](#)) uses reliable data to provide good current estimates. Those researchers added to the Joint Commission Sentinel Events reports data from 27 states reporting to the National Violent Death Reporting System (NVDRS) for 2014-2015. They found that 73.9% of these suicides occurred during psychiatric treatment. They estimate that between 48.5 and 64.9 hospital inpatient suicides occur per year in the United States. Of these, 31.0 to 51.7 are expected to involve psychiatric inpatients. Many of our prior columns have focused on the 26% that attempt or commit suicide when housed in locations other than behavioral health units.

In the Williams study ([Williams 2018](#)), hanging was by far the most common method for suicide in the hospital, accounting for about 70% of cases in both databases when a method was specified. Over 50% of the sentinel event suicides occurred in the bathroom.

Our August 29, 2017 Patient Safety Tip of the Week "[Suicide in the Bathroom](#)" discussed several cases of inpatient suicides occurring in bathrooms and highlighted many contributing factors, with recommendations to mitigate risks. Two recent published cases also reinforce the need for attention to suicide risks in the bathroom. In one ([Glathar 2018](#)) a patient hanged himself from the top hinge of a shower door (the case had other issues, such as staff failing to carry out 15-minute observations). In another case ([Mills 2018](#)), a patient who had cut both of her forearms with a kitchen knife in a suicide gesture, had her forearm laceration sutured and bandaged with gauze padding. She was then transferred to the inpatient psychiatric unit. There, she asked to use the bathroom, where she unwrapped the gauze bandage from her wrist, wrapped it around her neck and over the shower bar in the bathroom, and attempted to hang herself. Fortunately, staff heard a noise and responded and were able to cut the gauze before any serious injury occurred. (By the way, while we always recommend removing things like belts and shoelaces from patients on behavioral health units, who would have thought about the gauze bandage as a tool for suicide?).

We've discussed the VA's **Mental Health Environment of Care Checklist (MHEOCC)** in many of our columns. That [checklist is available online](#) on the VA Patient Safety website, as is an excellent [video](#) narrated by Peter Mills, MD. In our February 14, 2017 Patient Safety Tip of the Week "[Yet More Jumps from Hospital Windows](#)" we mentioned 2 publications ([Watts 2016](#), [Mills 2016](#)) showing sustained results from implementation of the Mental Health Environment of Care Checklist (MHEOCC). The checklist and program became mandated at all VA hospitals in 2007. Inpatient suicide rates in VA hospitals dropped from 4.2 per 100,000 admissions to 0.74 per 100,000 admissions from 2000 to 2015. The reduction in suicides coincided with introduction of the MHEOCC and has been sustained since implementation in 2007. The authors stress that the physical changes brought about by the MHEOCC likely have a bigger impact on inpatient suicide reduction than the numerous other interventions used.

One very pertinent question asked in the MHEOCC is "Are doors that are within rooms and that open to other in-room areas such as bath/shower/toilet areas (i.e., not corridor doors) designed to eliminate anchor points?". But keep in mind that almost any type of solid door might be used as an anchor even if it lacks latches, hooks, or other obvious loopable items. One could still conceivably loop bedsheets or clothing over the top of a solid door even if it has a "sloped" surface. Therefore, the MHEOCC recommends **soft break-away doors** for bathrooms and showers.

In our August 29, 2017 Patient Safety Tip of the Week "[Suicide in the Bathroom](#)" we recommended the following:

- Make sure you are using the Mental Health Environment of Care Checklist (MHEOCC) and rigorously adhering to it.
- Pay special attention to the MHEOCC recommendations regarding bathroom/shower doors about anchor points and use of soft break-away doors.
- If you have available ADA-compliant hand-held shower heads/hoses, make sure you have a system in place to ensure they are only used for those truly in need and that they are kept in secure locations with sign-in/out logs and some mechanism to ensure prompt removal of such items from patient rooms/bathrooms.
- Review your video monitoring policies with the privacy/safety tradeoff in mind and in keeping with all state, local and federal regulations.
- Always be sure that clothing items and bed items that might be used for looping/hanging are not available to at-risk patients.
- Make sure your staff understand the importance of monitoring while patients are showering or in the bathroom (and train them to resist intimidation).
- Make sure that any use of opposite-sex shower monitors does not prevent or deter compliance with monitoring.
- Review your protocols for intrahospital transports of potentially suicidal patients and review the safety features in bathrooms in locations such as your radiology suite.

But it's not enough to just ensure that bathrooms on your inpatient behavioral health unit meet the MHEOCC standards. Consider that the potentially suicidal patient on an intrahospital transport, such as a trip to the radiology suite, may lock him/herself in a

bathroom in that suite and there are a number of loopable items in those bathrooms. You'll recall that in our March 16, 2010 Patient Safety Tip of the Week "[A Patient Safety Scavenger Hunt](#)" we included the items below as ones to search for in your patient safety scavenger hunt:

- Find a location not on a behavioral health unit where a potentially suicidal patient is likely to temporarily be located (such as a bathroom in the radiology suite) and where they might lock themselves in.
- See how long it takes for staff to get access to that site (i.e. unlock the door).
- Determine how many potentially lethal items are in that room (eg. loopable structures on ceilings or walls, places a patient could jump from, toxic chemicals, etc.).

And, speaking of intrahospital transports, don't forget to the specific risks for wandering, elopement and/or suicide on your "**Ticket to Ride**" checklist for intrahospital transports (see, for example, our August 25, 2015 Patient Safety Tip of the Week "[Checklist for Intrahospital Transport](#)"). **Suicide risk** should be considered when patients are transported to Radiology (or other sites) whether the patient is on a behavioral health unit or medical unit (see our prior columns January 6, 2009 "[Preventing Inpatient Suicides](#)", February 9, 2010 "[More on Preventing Inpatient Suicides](#)" and December 2010 "[Joint Commission Sentinel Event Alert on Suicide Risk Outside Psych Units](#)").

Two recent California Department of Public Health reports also illustrate other risks during transports or transfers from one unit to another. In one ([CDPH 2018a](#)), a patient was sent to ED from a psychiatry unit, eloped from the ED, and was hit by a car. In the other ([CDPH 2018b](#)), a suicidal patient was being transferred back from the ED to a psychiatric unit, jumped up and ran away and jumped 25-40 feet from a building, suffering skull and spine fractures and numerous other fractures and body trauma. He survived but had a long hospitalization, multiple procedures, and multiple deficits. During the transport, the patient had been accompanied by a nurse assistant who had no training in managing suicidal patients and two security guards who were not authorized to restrain patients. They called local police but it was too late to prevent the jump from the building.

In the Williams study ([Williams 2018](#)), when a method of suicide was specified, 6-10% of the suicides involved jumping from heights. Several of our columns have discussed patients who **jump from windows** and we've noted features that are common to such incidents (see our Patient Safety Tips of the Week for April 12, 2016 "[Falls from Hospital Windows](#)", February 14, 2017 "[Yet More Jumps from Hospital Windows](#)", and July 10, 2018 "[Another Jump from a Hospital Window](#)"). These are typically patients who are being housed on general medical or surgical units and there is a pattern evolving. The typical patient is a young or middle-aged male, but occasionally elderly patients or females have also jumped through or out of windows. The patient is often admitted for an attempted suicide but, again, not always. Typically he/she is confused or hallucinating. It's not just patients with known psychiatric disorders or a history of suicide attempt that are at risk. Patients with brain injuries or delirium are at risk, particularly those who have demonstrated a tendency to wander or have verbalized their

intent to “get out of here” or “go home”. And the incidents have commonly occurred while patients are already on 1:1 continuous observation and the observer is actually in the room.

In these cases, patients were able to stand up on the bed and “launch themselves” through the window from the bed. That implies a proximity of the bed to the window. So one key lesson is to position the patient’s bed in the room at a reasonable distance away from the window so such “launches” are not possible.

Second, positioning of the observer may be important. The observer is usually positioned in the room on the side away from the window and near the door. We suspect that is intentional and may be a consideration for the safety of the observer plus it would allow the observer to easily yell for help if necessary. But that obviously needs to be rethought.

And some other less obvious equipment needs to be removed: the second bed in a 2-bed room should probably be temporarily moved. That can only hinder someone from attempting to rescue a patient who is trying to jump out of a window.

And since the patient often uses an object in the room to break the window, such as a chair or piece of medical equipment, care must be taken to make sure such objects are not in reach for a patient even for a very brief time. For example, if the observer needs to briefly leave the room perhaps the chair should be removed.

In our October 6, 2015 Patient Safety Tip of the Week “[Suicide and Other Violent Inpatient Deaths](#)” we noted that another potential vulnerability has to do with **fire alarms**. In one case a patient pulled a fire alarm which automatically unlocked doors on a behavioral health unit, allowing him to escape and jump to his death from a rooftop ([Pfeiffer 2010](#)). After we heard about that case we began to include inspection of stairwells and rooftop access points adjacent to behavioral health units in our patient safety walkrounds or environmental walkrounds.

Another recent case did not involve an actual suicide but serves as a reminder of how patients may use fire alarms to facilitate elopement ([Fettes 2018](#)). A patient on a behavioral health unit set his mattress and bedding on fire, triggering the facility's fire alarm. The alarm automatically disarmed the facility's fire doors and the patient left the unit. Fortunately, he was later found and returned to the unit. But the case illustrates a problem we’ve seen before. The behavioral health unit involved did not have a specific policy for “a combined fire and security incident”. You’ll recall we have recommended that facilities consider **combining safety drills** to account for such incidents. For example, you could do a fire drill and then immediately do a drill for a missing patient (or an abducted child).

Since several cases mentioned in today’s column have also involved the emergency department, it is worth noting a recent study on improving documentation of suicide risk factors in the ED ([Reshetukha 2018](#)). The researchers did an educational intervention on

suicide for all emergency medicine and psychiatry physicians. This was followed by the placement of a suicide risk assessment prompt within local ED's. Documentation of 34/40 and 33/40 suicide risk factors was significantly improved by emergency medicine and psychiatry physicians, respectively, after the interventions and maintained six months later. Another recent study also emphasized chronic pain as a significant risk factor in 10% of suicides ([Petrosky 2018](#)). While a wide variety of causes for chronic pain were noted, the most common were related to back pain, cancer, and arthritis, all common in patients seen in the ED.

Some of our prior columns on preventing hospital suicides:

- January 6, 2009 "[Preventing Inpatient Suicides](#)"
- February 9, 2010 "[More on Preventing Inpatient Suicides](#)"
- March 16, 2010 "[A Patient Safety Scavenger Hunt](#)"
- December 2010 "[Joint Commission Sentinel Event Alert on Suicide Risk Outside Psych Units](#)"
- September 27, 2011 "[The Canadian Suicide Risk Assessment Guide](#)"
- December 2011 "[Columbia Suicide Severity Rating Scale](#)"
- July 2012 "[VA Checklist Reduces Suicide Risk](#)"
- August 2013 "[Suicide Attempts on Med/Surg Units](#)"
- August 25, 2015 "[Checklist for Intrahospital Transport](#)"
- October 6, 2015 "[Suicide and Other Violent Inpatient Deaths](#)"
- March 2016 "[TJC Sentinel Event Alert on Preventing Suicide](#)"
- April 12, 2016 "[Falls from Hospital Windows](#)"
- February 14, 2017 "[Yet More Jumps from Hospital Windows](#)"
- August 29, 2017 "[Suicide in the Bathroom](#)"
- December 12, 2017 "[Joint Commission on Suicide Prevention](#)"
- July 10, 2018 "[Another Jump from a Hospital Window](#)"

Some of our past columns on issues related to behavioral health:

- January 6, 2009 "[Preventing Inpatient Suicides](#)"
- September 22, 2009 "[Psychotropic Drugs and Falls in the SNF](#)"
- February 9, 2010 "[More on Preventing Inpatient Suicides](#)"
- March 16, 2010 "[A Patient Safety Scavenger Hunt](#)"
- December 2010 "[Joint Commission Sentinel Event Alert on Suicide Risk Outside Psych Units](#)"
- September 27, 2011 "[The Canadian Suicide Risk Assessment Guide](#)"
- December 2011 "[Columbia Suicide Severity Rating Scale](#)"
- July 2012 "[VA Checklist Reduces Suicide Risk](#)"
- August 2013 "[Suicide Attempts on Med/Surg Units](#)"
- January 15, 2013 "[Falls on Inpatient Psychiatry](#)"

- April 2, 2013 “[Absconding from Behavioral Health Services](#)”
- August 25, 2015 “[Checklist for Intra-hospital Transport](#)”
- October 6, 2015 “[Suicide and Other Violent Inpatient Deaths](#)”
- March 2016 “[TJC Sentinel Event Alert on Preventing Suicide](#)”
- April 12, 2016 “[Falls from Hospital Windows](#)”
- February 14, 2017 “[Yet More Jumps from Hospital Windows](#)”
- March 14, 2017 “[More on Falls on Inpatient Psychiatry](#)”
- August 29, 2017 “[Suicide in the Bathroom](#)”
- December 12, 2017 “[Joint Commission on Suicide Prevention](#)”
- February 6, 2018 “[Adverse Events in Inpatient Psychiatry](#)”
- July 10, 2018 “[Another Jump from a Hospital Window](#)”

See our previous columns on wandering, eloping, and missing patients:

- July 28, 2009 “[Wandering, Elopements, and Missing Patients](#)”
- December 2012 “[Just Went to Have a Smoke](#)”
- April 2, 2013 “[Absconding from Behavioral Health Services](#)”
- October 15, 2013 “[Missing Patients](#)”
- December 2013 “[Lessons from the SFGH Missing Patient Incident](#)”
- April 7, 2015 “[Missing Patients and Death](#)”
- October 6, 2015 “[Suicide and Other Violent Inpatient Deaths](#)”
- April 12, 2016 “[Falls from Hospital Windows](#)”

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