Case & commentary: suicide risk in the hospital

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The Case

A 37-year-old woman with a past medical history of depression, anxiety, and posttraumatic stress disorder presented to the emergency department (ED) after a suicide attempt. She overdosed on 3–4 tablets each of alprazolam (a sedative) and gabapentin (a pain medication) and then cut both of her forearms with a kitchen knife. Upon presentation to the ED, the patient endorsed active suicidality. She had no previous suicide attempts. Her physical examination was significant for a tearful, depressed affect and superficial lacerations to the bilateral forearms, including a 3 cm laceration on the left forearm.

The patient’s left forearm laceration was sutured and bandaged with gauze padding. The patient was observed for a period of several hours postingestion, and she was evaluated by a psychiatrist who placed an involuntary legal hold due to high risk of self-harm. She was then transferred to the inpatient psychiatric unit. On arriving to the unit, the patient asked to use the bathroom. She then 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, a staff member heard a noise from the bathroom, immediately entered, and cut the gauze before the patient was seriously injured. The patient was transferred back to the ED, where she was found to have superficial abrasions to her neck but an otherwise normal physical exam. A CT scan of the head and cervical spine was obtained, which was normal. She was ultimately readmitted to the inpatient psychiatric unit for further treatment of her depression and suicidality.

The Commentary

Suicide is the 10th leading cause of death in the United States, resulting in the deaths of more than 42,500 people in 2014. The Centers for Disease Control and Prevention estimates that in 2013, 9.3 million adults had some form of suicidal ideation, 2.7 million formulated a plan, and 1.3 million attempted suicide. In addition, 494,169 people were treated for self-harm in emergency departments. The American Psychiatric Association reported in 2003 that approximately 1,500 completed suicides take place in inpatient hospital units in the US each year and, despite focused efforts, one-third of these occur while the patient is being observed with 15-minute checks. A recent international meta-analysis, Walsh and colleagues found a pooled estimate of 147 suicides per 100,000 inpatient years (95% CI: 138-156) and the estimated number of admissions per suicide to be 676 (95% CI: 604-755). Risk factors for inpatient suicide include affective disorders, depressive symptoms, schizophrenia, previous self-harm, and recently being admitted to the unit. In addition, factors such as acute anxiety and sleeplessness, comorbid substance abuse, chronic illness, pain, and psychosocial stressors (e.g., job loss, divorce, or separation from children) may increase suicide risk. In this case, the patient has several risk factors including affective disorder, depressive symptoms, and most importantly, a recent serious suicide attempt. Patients who are not well known to the inpatient staff and have...
this cluster of symptoms should be placed on one-to-one observation until a thorough evaluation can be completed and the patient’s mood stabilized. In a recent study of adverse events occurring on mental health units in the Veterans Health Administration (VHA), we found that the primary root causes for suicide attempts on mental health units included poor communication of risk, problems with the observation protocols, need for more standardized assessment and treatment protocols, and need for staff training. In this case, it is not clear if the patient was on one-to-one observation, but we do know that the patient was allowed to use the bathroom alone. Patients under observation in emergency departments and mental health units are sometimes allowed to use the bathroom unattended, giving them an opportunity for self-harm. It is critical to develop a protocol for one-to-one observation and train staff in its use. It can be socially uncomfortable for staff to observe patients in the bathroom, so this aspect of the observation should be practiced and strategies developed to overcome the barriers to providing this observation.

The next breakdown in the case was allowing the patient to be on her own without a clinical evaluation on the unit. The patient was evaluated in the emergency room and considered at high risk. It is not clear if this information was transferred to the unit staff when handing off the patient. Loss of critical information during patient transfers is a common root cause of suicide attempts and deaths throughout the hospital.

Clinical evaluations of risk should be standardized and performed as soon as possible when the patient arrives on the unit. This is a high-risk time because the patient is likely to be agitated, in a new environment, and possibly still reacting to the effects of substances taken prior to admission. It is a difficult time for the staff as well because they do not yet know this patient, what she is capable of doing, and what her specific patterns are.

Assessing the patient’s level of distress and suicidality as well as her overall mental and physical status, mental health history (including previous suicidal behaviors), and psychosocial stressors is crucial. Only then can a determination be made about the level of observation that is appropriate. It is helpful to use a standard template for the initial evaluation on the unit so that all important questions are asked.

Finally, there are problems with the safety of the environment of care on this unit. In this case, the patient was able to attempt to hang herself from an anchor point in the bathroom. From our studies of suicide attempts and deaths in mental health units, we know that hanging is the most common method of suicide attempts, as well as the most lethal. We also know that private areas such as bathrooms and bedrooms are the most common areas on the unit for self-harm. Removing all anchor points from patient bathrooms and bedrooms on mental health units is therefore essential for preventing suicide attempts. This can be accomplished using an environmental checklist such as the “Mental Health Environment of Care Checklist” that has been used in the VHA since 2007.

We have found that using a standard checklist for environmental rounds allows the team to identify and abate hazards, such as anchor points, sharp edges, possible weapons, elopement opportunities, areas to hide hazardous materials, lanyards for hanging, and blind spots where a patient could hide and assault staff. In the VHA, we use the checklist to review all mental health units in our system every 6 months. It is helpful to form a team of reviewers that includes staff who are not usually on the unit and to change the members on the review team in order to have fresh input on what constitutes a hazard. Since implementing the checklist in 2007, the rate of suicide on inpatient mental health units in VHA has been reduced, from 4.2 per 100,000 admissions to 0.74 per 100,000 admissions in 2015.

Take-Home Points

- Place high-risk patients on one-to-one observation and develop training for staff conducting one-to-one observation that includes a protocol for observation while using the bathroom.
- Conduct a thorough evaluation and risk assessment (using a template) before allowing patients to be unsupervised on the unit.
- Remove all anchor points for hanging in private areas such as bedrooms and bathrooms.
- Use a standard checklist to review the mental health unit for environmental hazards every 6 months.

The case presented in this article is fictitious and originally appeared on the Agency for Healthcare Research and Quality (AHRQ) website at https://psnet.ahrq.gov/webmm/case/445/.

References


Care wanted to enhance what they had previously piloted, so they worked together and created some mockups to improve its ease of use and refill tracking features.

Rx Refill went live as a web-based mobile application last year. The soon-to-be-released iOS update will allow Veterans to download it to their iPhones. The team is also looking into a native app for the Android platform. That will be great, since Veterans can just open it and refill their meds with the push of a couple of buttons.

To download the Ask a Pharmacist, Rx Refill and other VA mobile applications, go to https://mobile.va.gov/appstore/.

While working as a VA staff pharmacist in Fayetteville, Arkansas, Eric Spahn became interested in the pharmacy information on My HealtheVet, the VA’s online self-management portal for Veteran patients. Spahn thought that having a way for Veterans to speak with pharmacists directly would be an added benefit and fit well into the overall goals of My HealtheVet. So, he submitted his idea as a clinical content request. Around this same time, My HealtheVet happened to be rolling out Secure Messaging, so they approached him about incorporating his idea onto that platform.

Spahn originally suggested creating pharmacy triage groups in Secure Messaging, so Veterans could send a message to a general pharmacy group called “Ask a Pharmacist.” To help manage the potential volume of such a tool, the technology request was coupled with the expectation that each VA facility assign pharmacy staff to participate.

Not only was the Ask a Pharmacist idea useful to patients, but caregivers and staff also began to use it to send questions to pharmacy 24 hours a day. It really caught on.

But something was missing. Spahn still wanted to provide access to general medication information, especially VA-specific pharmacy data. This led him to submit a proposal for a simple medication-informational app, which also encouraged the use of the Ask a Pharmacist Secure Messaging effort that he was marketing.

“There’s so much information on the internet, that it is difficult to know what medication information you can trust,” said Spahn. “Don’t go to a blog or some random website. Here are VA trusted sites anyone can use to find general medication information that has been vetted by the VA pharmacy program.”

Thus, the Ask a Pharmacist app was officially created and released in 2016, and it compared favorably with the private sector. Veterans can find resources, ask questions, and know that their VA pharmacist or pharmacy technician will respond. VA also partnered with the National Library of Medicine and VA Medication Image Library (MIL) to include a link to Pillbox, to help identify unknown pills (oral, solid-dosage form medications), which uses many of its images from the VA MIL.

The Ask a Pharmacist app provides an example of the VA patient-centric prescription label to help users understand how to administer their medicine safely. A plethora of information exists online, but the app uses VA sites or content from other “dot-gov” sites, such as fda.gov. The app also provides general questions and answers to much of the pharmacy information available on My HealtheVet.

As of the first quarter for fiscal year 2018, there were more than 520,000 active users of pharmacy triage groups in Secure Messaging. VA pharmacists answered more than 33,000 pharmacy questions in that quarter alone. In addition to supporting automation of prescription refill and tracking services, both apps are answering Veterans’ questions and reducing call-center volume.

In addition to the Ask a Pharmacist app, Spahn has also been involved with the recently released Rx Refill mobile application. The Office of Connected
VA health care rated same or better than private hospitals

RAND study finds VA provides high-quality health care

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Veterans receive the same or better care at U.S. Department of Veterans Affairs (VA) medical facilities as patients at non-VA hospitals according to a recent RAND Corp. study.

“The RAND study adds to a growing list of research confirming what many Veterans and VA employees believe – VA provides high-quality care,” said VA Acting Secretary Robert Wilkie. “We are constantly striving to improve our care at VA, but this should encourage Veterans and the public that VA care is in many instances as good as or better than the private sector.”

The study, which was published online April 25, compared each VA facility to three non-VA facilities with similar geographic settings (rural/urban), size (number of beds) and complexity of care. The analysis focused on three of the six “Domains of Quality of Care” as defined by the Institute of Medicine, (now known as the National Academy of Medicine) including safety, effectiveness and patient-centered care.

The authors of the RAND study analyzed inpatient and outpatient performance measures used by VA and non-VA hospitals. On inpatient care, VA hospitals performed on average the same or significantly better than non-VA hospitals on 21 of 26 measures. VA performed significantly better than commercial and Medicaid Health Maintenance Organizations on 28 of 30 measures, with no difference on the other two. There was a wide variation in performance across VA, but an even wider variation among the non-VA hospitals.

For more information, see the quality data available on VA’s Access to Care website at www.accesstocare.va.gov.

Cornerstone Recognition Program salutes patient safety

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Recognizing the exceptional work for patient safety being done at VHA facilities has always been the goal of the Cornerstone Recognition Program. The program, led by the VA National Center for Patient Safety (NCPS), delivers nonmonetary recognition to Veterans Integrated Service Networks (VISNs) and their VHA facilities. It is available to all VHA facilities nationwide, with three levels of achievement: gold, silver and bronze.

Originally focused solely on components of the Root Cause Analysis (RCA) process, over time and based on recommendations from the field, these criteria have expanded to reflect the broader scope of a robust patient safety program. Every two to three years, NCPS updates the Cornerstone criteria to draw attention to contemporary issues pertaining to patient safety. At the end of each fiscal year, NCPS analyzes multiple sets of data submitted by the facilities to determine levels of achievement.

VHA is constantly striving for higher levels of patient safety, and Cornerstone focuses on the important work of reporting “close calls,” analyzing actual adverse events via RCAs, along with building a culture of safety.

Additionally, an overarching objective of Cornerstone is engaging leadership in support of patient safety. The Cornerstone program has enjoyed broad attention among VHA leaders, growing stronger year after year.

Recently, there has been increased interest in sustaining patient-safety improvements, which is no small challenge in the rapidly changing health-care environment. The Cornerstone criteria expanded to include facility self-assessments as a method of monitoring continued compliance with previously published alerts and advisories. Additionally, facility self-assessments draw together interdisciplinary teams, reinforcing a core value that patient safety benefits when more staff are involved.

NCPS encourages the implementation of actions with a higher likelihood of sustainment. When an organization fixes something, they want it sustained. For example, for safety reasons, a microwave will not operate with the door open, reducing the risk of harm. In medical care, patient safety uses the same concept: to reduce the risk of harm through the design of the process and/or equipment. With that in mind, NCPS has published a list of processes and equipment fixes that are most likely to be sustained based on inherent human factors strength. This “Hierarchy of Actions” is widely available and RCA teams reference it to achieve stronger fixes. In 2015, NCPS expanded the criteria by giving facilities the flexibility to select the criteria best supported by their organizations. Since then, there has been a dramatic increase of facilities achieving Cornerstone Gold Recognition.