Patient Safety Initiative Update

On April 1, 2008 mandatory reporting of adverse patient safety events took effect for psychiatric, special and comprehensive rehabilitation hospitals. General hospitals continue to report as required under the reporting system in effect since 2005. On June 6, 2008 the Patient Safety Initiative conducted a special training session for these newly reporting hospitals on event reporting and RCA development. In attendance were a total of 42 staff representatives from psychiatric hospitals, special hospitals, and comprehensive rehabilitation hospitals.

Overview: Suicide in the Hospital Setting

Clinical Rationale

Suicide is a key public health problem in the United States. It is the 11th leading cause of death in America and the 3rd leading cause of death among American youth. This high rate of suicide is also a significant issue for hospitals. According to The Joint Commission, suicide has been the most frequently reported type of sentinel event for patients in a “staffed, around-the-clock care setting” since 1996.¹

At least 90% of those who commit suicide had an underlying mental illness and/or substance abuse disorder.² A retrospective matched-case study was conducted for three hospitals in Mobile, Alabama.³ This study found that the rate of suicide in general hospitals was three times higher than in the general population, 32/100,000 versus 12/100,000 respectively. Among the suicides committed in the hospitals, 73% had been diagnosed with mental illness and/or substance abuse disorder and only 1 of the 44 subjects (both cases and controls) had been referred for psychiatric consultation.

The elevated suicide rate in acute care facilities supports the need for special focus on suicide prevention policies and programs. The Joint Commission recognized this need in its 2008 National Patient Safety Goal 15A. Health care facilities are required to identify patients at risk for suicide. This includes performing a risk assessment to identify specific factors or features that may increase or decrease risk of suicide.¹

Suicidal Behaviors

The first step toward identifying at-risk patients is understanding the different forms of suicidal behavior, which exist or occur on a continuum:
Suicidal ideation: thinking or talking about committing suicide. This can include actually planning the suicide. Activities associated with suicidal ideation include making a will, getting affairs in order, unexpectedly visiting family and friends, buying a gun or rope, writing a suicide note, and visiting a primary care physician. Passive suicidal ideation is when a patient states that they wish they were dead, but would never intentionally try to commit suicide.

Suicidal gesture: making an unusual, but nonfatal, behavioral bid for help. This can include cutting and attempting to overdose. These behaviors should be treated as suicidal. If the patient is not satisfied with the outcome of the gesture, he/she may move on to more lethal measures.

Suicide attempt: an intentional act that causes self-harm. This act will be fatal if direct intervention does not occur. A suicide attempt is not a harmless effort to gain attention, it is an extreme expression of distress.

Risk Factors
There are a number of risk factors that may predispose a patient to suicide, including patient demographics, medical condition and life experiences.

Mental Illness and Substance Abuse
Mood disorders (e.g., major depression or bipolar disorder) and a stressor (e.g., death of a loved one or divorce) are closely linked to suicide. Those at highest risk for suicide are patients with a combination of substance abuse and mood disorder. Patients who exhibit schizophrenia also have a high rate of suicide. In particular, patients with schizophrenia may become vulnerable for suicide when they realize they have a mental illness or that they are different from other people. Also, these patients may experience hallucinations such as hearing voices commanding them to kill themselves.

Medical Condition
Studies have found evidence of an increased risk of suicide in patients with protracted, painful, progressive medical conditions (e.g., AIDS, cancer, multiple sclerosis, and quadriplegia). Patients with AIDS are 16 to 36 times more likely to commit suicide than the general population. The combination of older patients with cancer also increases the risk of suicide.

Demographic Factors
There are many demographic factors that influence suicidal behavior, including sex, age, ethnicity, sexual orientation, socioeconomic status, geography and the season. In the United States, men commit completed suicide four times as frequently as women. However, women attempt suicide approximately three to four times as frequently as men. In 2005, 25,907 men committed suicide in the U.S. compared with 6,730 women. In terms of frequency, overdose, poisoning and suffocation tend to be the method of suicide for women, while men use firearms as a means of death.

Suicide rate increases with age. People over 65 years have the highest rate of suicide. In younger populations it is rare for a child to attempt suicide before age 10. However, in 2004, suicide was the third leading cause of death in adolescents; 12.9% percent of deaths among 15 to 24 year olds were due to suicide. Furthermore, gay, lesbian and bisexual (GLB) youth are between two and six times more likely than heterosexual adolescents to think about and to attempt suicide. Although the relationship between sexual orientation and suicide remains largely unknown, GLB youth are more likely to be victimized at school. Studies have shown that GLB youth also have higher rates of substance abuse and psychiatric disorders including major depression, generalized anxiety disorder, and conduct disorder.

In the United States, the non-Hispanic Caucasian and American Indian/Alaskan Native populations have the highest rate of suicide, approximately 12.9 per 100,000 and 12.4 per 100,000 respectively. Poverty and low income, with fewer options and opportunities for medical and mental health treatment, correlate with suicide. Geography and the season also play an important role in the rate of suicide for Americans. Rural western states, such as Wyoming, Montana, Nevada, Alaska and New Mexico, are the top five states in terms of suicide rates. Suicides occur more often during spring and summer, notably in May, with a secondary peak in the fall, not during the winter holidays.
Life Experiences

Life experiences also play an important role in the risk of suicide. Personal issues like the recent loss of a job, a family member or friend, loss of a romantic interest, or divorce can be so devastating that patients feel they can never recover. A previous suicide or suicide attempt by the patient or a friend, or a family history of suicide can provoke the patient into duplicating the event. Unlike the patient’s medical condition, the negative factors of a patient’s life experience are typically transitory and only discoverable through direct questioning. Of all the factors to consider, the recent death of a family member or friend by suicide is the strongest life event linked to the act of committing suicide.

Recommendation: Identification of the At-Risk Patient

There is no proven method for suicide risk assessment and no method is completely accurate. Upon admission, every patient’s family history of mental illness and suicide should be carefully assessed, and clinicians should explore whether the patient is contemplating suicide. Some clinicians have difficulty inquiring about potential suicidal behavior since they erroneously believe that the question itself may be too intrusive or may provide the person with the idea of suicide. However, most patients appreciate having a clinician ask them about suicidal ideation as they tend to perceive this as evidence that the clinician cares about the patient. If the patient does give a positive response to a question about suicide ideation, the clinician should follow up with questions about any plans to commit suicide. The mental health literature shows that more specific plans indicate greater risk. A common misconception in assessing suicidal risk is assuming that less lethal means (e.g., pills) indicate a less intense desire to commit suicide. Prior attempts are the most important factor for suicide risk.

Since suicidal patients frequently seek to hide their true intentions, clinicians should remember that denial of suicidal ideation is not sufficient to rule out the presence of suicidal risk. Collateral questions should be asked based on the patient’s suicidal risk factors including symptoms of depression or mania, psychosis, delirium and dementia, losses (especially recent ones), substance abuse, and any family members or friends who have died or attempted to kill themselves.

1. After being rescued from her burning house, the patient was brought to the hospital and admitted for treatment of smoke inhalation. Family members told staff that the patient had a history of depression and were concerned that she would try to kill herself when she learned of the death of her family. Security was alerted. She was transferred to a med/surg floor; other family members arrived and went straight into her room and told her of the deaths. The patient became distraught, tied a bed sheet around her neck and declared that she wished to be with her children. Her nurse entered and cut the sheet from her neck.

Response: As a result of the RCA process, the hospital created a multidisciplinary Behavioral Health Response Team to respond immediately to a patient on the med/surg floor in a behavioral health crisis and perform an immediate evaluation before any visitors are permitted.

Recommendation: Interventions/Protection

Several methods for reducing the potential for suicide in hospitals have been proposed. The first is the use of 1:1 or continuous observation (CO). This can be highly effective provided that the person observing the suicidal patient does not become distracted or implementation of the observation is not delayed, as can frequently happen in a hectic environment such as the ED. It is also critically important to ensure the person conducting the observation is trained to do so.

2. A patient was brought to the ED for evaluation of seizure-like activity. After she attempted to pull out her IV and stated “they want to kill me,” an order for a 1:1 observation and a psychiatric consultation was written by the ED attending physician. Seventy minutes later the patient was found with nasal cannula tubing wrapped around her neck. The 1:1 had yet to be initiated. The psychiatrist noted that the patient had a history of chronic bipolar illness and multiple suicide attempts.

Response: Although this patient suffered no physical harm from this attempt, the RCA team developed a process for immediate implementation of the 1:1 order.
Frequent observation (i.e., q 15 rounding) is another commonly used technique and allows for staff to observe several patients while performing other duties. The Department has received reports, however, of patients timing their suicidal behavior to coincide with the rounding pattern. This can be addressed through altering rounding patterns occasionally (e.g., 5 – 15 minutes).

3. A patient presented to the hospital for voluntary admission to the psychiatric floor for recurrent, severe depression and suicidal ideation. A treatment plan of therapy, medications and q 15 minute checks was implemented. Six days later he was found with a sheet around his neck, hanging from the side of his bed. CPR was initially successful; however the patient died several hours later.

Response: After performing the RCA, the hospital made a series of changes to ensure safety: changed the q 15 minute checks to “Status Checks” to be performed at staggered, random intervals; developed a mandatory Open Door Policy when a patient is in the room and a Locked Door Policy when patients are in group or at meals; and placed half-dome security mirrors outside Nurses’ Stations to increase visualization.

Recommendation: Identifying Environmental Risks

Hospitals reporting attempted or completed suicides by patients have identified a number of environmental risk factors that contribute to suicidal behavior. Patients have hung themselves using bed sheets tied to door knobs, door hinges and exposed pipes in the lavatory. Older hospitals tend to have bathroom door locks, allowing the patient to commit suicide without anyone being able to intervene. Windows in patient rooms or hallways have been broken, allowing patients to cut themselves and/or jump. Video surveillance cameras have failed to observe all areas of a room, allowing patients to avoid detection. These risk factors can be addressed through architectural changes to patient rooms or holding areas.

Overall Recommendations

Hospital policies for the oversight of actively or potentially suicidal patients should be clear. When identified, a suicidal patient must not be left alone. In the ED, this recommendation may be handled by hospital security personnel. Contraband, such as knives and pills or any potentially lethal personal item such as drawstrings, belts, etc. should be removed before initiating an intervention. In some cases, necessary authorization may be required before searching the belongings or person.

4. A day after being discharged from the hospital’s Behavioral Health Unit (BHU) after a suicide attempt by overdosing, the patient was brought by the police to the closest hospital for an apparent overdose. After medical stabilization, she was transferred back to the original hospital and readmitted to the BHU. The next day, she was found unresponsive, an overdose was suspected and she was successfully revived. A search of her room revealed a bag of medications hidden under her mattress.

Response: During the RCA investigation, the hospital found that the medications were transported from the other hospital, they had not been identified and secured upon the patient’s admission, and the daily room search for medications and items that might be used for self-injury was not done. The hospital immediately developed a new policy and began careful monitoring the interventions to assure that they were consistently performed.

Reliance on “no-suicide” contracts should not be considered a sufficient intervention strategy. However, a patient’s refusal to sign such a contract may offer insight into a patient’s potential for suicidal behavior. According to the Minnesota Office of the Ombudsman, such contracts were in place for almost every suicide that occurred in an inpatient, acute care facility.

5. For the fourth time in two months, the patient was brought to the hospital after a suicide attempt. The first time, he had cut his wrist with a razor and the other three times were drug overdoses. His admitting diagnosis was drug overdose, major depressive disorder and a history of drug abuse. During his admission and throughout his hospitalization, he consistently
denied active suicidal ideation or a desire to harm himself or others. On the sixth day, he was found on the bathroom floor, without a pulse or respirations, with a belt tied around his neck and the plumbing pipes. He was resuscitated, intubated and placed on a ventilator; however the patient died two weeks later.

Response: After the RCA team conducted its investigation and analysis, it was discovered that the patient’s family had brought her a bathrobe with a belt and this had not been catalogued and secured as per the existing policy. They also found that because this floor had initially been designed and used as a med/surg floor and converted to a Behavioral Health Unit, there were still some door knobs, exposed pipes and other potential hazards. The day after this event, the hospital conducted a walk-through inspection and has already begun the environmental changes.

Recent Joint Commission guidelines have criticized the use of seclusion and physical/chemical restraints for actively suicidal patients stating that these measures are overly restrictive. Instead, they recommend continuous face-to-face or one-to-one observation by an assigned staff member. This technique, termed continuous observation (CO), is also known by other terms including 1:1, special observation and maximum observation.

Some hospitals have been reluctant to implement widespread use of CO due to the increased cost. This has been addressed in some hospitals by requiring psychiatric consultations to authorize CO. Staff members engaged in CO should be relieved of other duties and made aware of the potential for distractions, especially within the ED.

The potential for suicides in hospitals could be reduced by improving hospital staff awareness of more accurate assessments based on risk factors, developing environmental protections and better interventions.

Documentation Recommendation

Documentation is important for protecting patients, staff, and the healthcare facility. The following recommendations for recordkeeping were written by Christos Ballas, MD and supplemented by Daniel J. Reidenberg, Psy.D., FAPA, Executive Director of Suicide Awareness Voices of Education:

- Be clear and avoid making inferences, hypothesizing or theorizing.
- Report your clinical judgment based on the facts that led you to your assessment.
- Assessment should lead clearly to your intervention and subsequently to your plan.
- Document risk factors assessed and patient’s strengths.
- Whenever possible, use quotes from patient, staff, or family members.
- Document what you did and why.
- Document what alternatives you did not choose and why.
- Make your report logical, organized and complete.
- Write less about the symptoms and more about your assessment and clinical judgment.
- Document who you talked to or consulted.

Resources on Suicide Prevention

American Association of Suicidology available at: http://www.suicidology.org

American Foundation for Suicide Prevention available at: http://www.afsp.org


National Suicide Prevention Lifeline 1-800-273-TALK

Suicide Awareness Voices of Education available at: http://www.save.org

Suicide Prevention Resource Center available at: http://www.sprc.org

Wisconsin Department of Health and Family Services “Clarification: Environmental Suicide Prevention” available at: http://dhfs.wisconsin.gov/rl_DSL/Hospital/Hosp01-032.htm
Acknowledgement

The NJ Patient Safety Initiative would like to thank Daniel J. Reidenberg, Psy.D., FAPA, Executive Director of Suicide Awareness Voices of Education, for sharing his knowledge and expertise on this subject.

References

2. Office of Disease Prevention and Health Promotion, “Healthy People - 2010 Chapter 18 Mental Health and Mental Disorders” Available at: http://mentalhealth.samhsa.gov/features/hp2010/objectives.asp
10. Agerbo E, Quin P, Mortensen PB, “Psychiatric Illness, Socioeconomic Status, and Marital Status in People Committing Suicide: A Matched Case-Sibling-Control Study” J Epidemiol Community Health 2006;60(9):776-781

For more information or comments on this issue or past issues of the Patient Safety Initiative Updates please contact:

Patient Safety Initiative Tel: (609) 530-7473
Patient Safety Web Site: www.NJ.gov/health/ps