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Suicide Risk Assessment in a Psychiatric Medical Unit

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Suicide is a major health concern in the United States. In a scholarly article, Hutton (2015) found that annually, 2.2 million adults plan suicide, 8.3 million have thoughts of suicide, and 1 million adults attempt suicide. A 2013 Center for Disease Control (CDC) analysis found that suicide rates among persons age 35 to 64 years have increased during the years of 1999-2010 by 28.4%. Bolton, Gunnell, and Turecki (2015) found that suicide is a major international public health problem claiming one life every 40 seconds. The study also states suicide is a second leading cause of death in people age 15-29 years and was responsible for 39 million disability adjusted life years in 2012. At least six close relatives or friends are bereaved by every suicide and family and friends also have an increased risk of depression and suicide. Finally, the study states that for every death from suicide, 30 people attempt suicide; in the United States, this amounts to one million people each year.

Suicide is especially problematic for patients after a psychiatric inpatient admission. In a 36 year observational follow-up study of the Danish population, the cumulative risk of suicide in people who had inpatient or outpatient clinical contact with specialized mental health services was 4% in men and 2% in women. Although this number is small and suicide events are rare, the goal is to prevent all suicidal events. The purpose of this paper explore how new findings about suicidality can improve suicide assessment.

Chapter 1: The Microsystem and the Problem

Microsystem Assessment

The inpatient psychiatric (IPP) unit is within a mid-sized Midwestern medical hospital and it provides care for psychiatric patients with medical comorbidities. Since the IPP unit frequently provides care for patients with the diagnosis of depression and suicidal ideation (SI), suicide prevention is an important goal for the staff. Assessment of suicide risk is an important component of suicide prevention both during and after admission.

The IPP is unique resource for psychiatric patients in the area. The microsystem has a clear purpose statement: the IPP unit cares for those affected with both medical and psychiatric disorders using a patient and family-centered approach. Their focus is to provide compassionate, holistic, and relationship-based care using an interdisciplinary approach. This purpose is evident in the focus on quality improvement evident at the IPP unit.

The IPP unit cares for patients with a variety of psychiatric and medical diagnosis, with the most common psychiatric diagnoses including psychoses and major depression. The patients at the IPP unit also have variety of medical comorbidities including diabetes, heart disease, and traumatic injuries from suicide attempts. The 28 bed unit has an average daily census of 27 patients, so the floor is usually full. The average length of stay at the IPP unit is currently 16 days. The payee mix is 45% Medicare, 45% Medicaid, and 10% self-pay.

The staff mixture on the IPP unit include nursing, patient care technicians, physicians, social workers, pharmacists, nutritionists, and occupational therapists. There is an approximate 2:1 nurse to nursing tech ratio. A few of the nurses have been at the IPP unit for more than twenty years. However, most of the nurses are level 2 (Advanced Beginner), in Benner's Skill Acquisition Model. No agency nurses are used on the unit. There is a well-balanced skill mix for

the unit. The hours budgeted per patient is 9.939 hours while the actual hours used is 10.2 hours. This means that the unit is moderately busy, but not overwhelmingly so. The IPP unit has a very dedicated staff.

Although the IPP unit is very efficient, there are challenges to running such a specialized unit. One of the challenges is that suicide risk assessment done by nurses is inadequate. Suicide risk assessment is a priority for the Clinical Nurse Leader (CNL) and the other leaders at IPP for this high-risk population. Care for each psychiatric patient is very specialized and narrative charting is used more extensively than check boxes.

The current suicide risk assessment at the IPP consists of asking the patients if they are experiencing thoughts of hurting themselves. An answer "yes" prompts asking a few more questions about history of self-harm and thoughts of suicide to assess the extent of the risk. These questions come from parts a larger tool called the Columbia Scale (Greist et al., 2014). There is also an option to document more of the assessment in a narrative portion of the chart. Narrative charting is extensively used by the nurses at the IPP unit as it more accurately describes the unique population and there is no way within the electronic record to document a thorough psychiatric assessment using the standard charting system. The nurses at the IPP verbalize that they feel that the current assessment does not provide the interdisciplinary team with an accurate picture of a patient's suicide risk.

A chart review was done to assess nurses' documentation of patients' suicide risk at the IPP unit. The IPP unit chart review confirmed that the current suicide risk assessment documentation does not provide an accurate picture of the patients' suicide risk. In 18.5% of the charts the assessment was simply not completed. In 3.7 % of the charts the documentation indicated that although the patients denied thoughts of harming themselves, they were expressing

thoughts of isolation and feelings of being a burden to their family. Because patients may be reluctant to verbalize thoughts of hurting themselves and because suicide attempts are often acts of impulse, solely asking patients about suicide ideation is not an accurate assessment of suicide risk. Since the development of a care plan (including a safety plan for suicide prevention) depends on the documentation of a suicide risk assessment. An accurate assessment is a patient safety issue because failure to identify patients who are at high risk for suicide may result in a failure to develop an adequate safety plan before discharge.

Typically, at the IPP unit, when patients are identified as high risk, patients are encouraged to develop a safety plan and to develop protective relationships. The safety plans are usually developed by the patient with the assistance of social workers. The patients are given a worksheet in which they are asked to identify coping skills, a healthy daily routine, people to talk to for emotional support, people who are professional supports, reasons for living, and triggers. Nurses and therapists help patients complete their safety plans before discharge.

Moreover, both assessment of patients and the documentation of these assessments are important nursing functions. Assessment is listed as a key competency for psychiatric nurses (American Psychiatric Nurses Association, 2008). Based on this assessment, psychiatric nurses are expected to differentiate between a patient who is chronically at risk for suicide and a patient who is acutely at risk for suicide. Documentation is also listed as a key competency for psychiatric nurses (American Psychiatric Nurses Association, 2008). Accurate documentation is key in communicating assessment findings to the interdisciplinary team. Documentation is the foundation of developing a relevant care plan that helps keep patients safe (Bergen, Hawton, & Waters, 2010). Suicide risk assessments and the documentation of this assessment direct the interdisciplinary team in the development of a safety plan for patients and helping the patient

foster supportive relationships. The end goal of such measures is to prevent incidence of suicide. More accurate suicide risk assessment has the potential to decrease suicide rates (Bergen, Hawton, & Waters, 2010).

Problem

Suicide risk is challenging to assess because it usually relies on the patient's self-report. Such assessment is often unreliable because patients may not be comfortable sharing suicidal feelings or may even be purposely concealing suicidal plans. Older adults are especially reluctant to verbalize suicidal ideation even though older adults are more likely to seek psychiatric help (Huh, Weaver, Martin, Caskey, O'Riley, & Kramer, 2012).

Therefore, improving suicide risk assessment and documentation is a priority quality improvement project for the IPP unit. New competencies for psychiatric nurses were communicated by the American Psychiatric Nurses Association in 2008. These competencies emphasized assessment as a key competency for psychiatric nurses. Since the competencies were released, improving suicide risk assessment has been a focus for the leadership at the IPP.

In recent years, steps to improve suicide risk assessment were taken to meet with the competencies for psychiatric nurses communicated in 2008. The nurses were presented with education about how to assess for suicide risk. A new template was developed to assess for patients' risk factors and protective factors for suicide. The plan had been to put the template in a database called Share Point. This template was to be copied and pasted into patients' charts. However, it was soon evident that the template was not made available for the nurses to use. Thus, the current problem is that the IPP is not in compliance with the 2008 Psychiatric Nurses Association competencies.

Chapter 2: Literature Review

The question explored in this paper is for nurses in the acute psychiatric care setting, what is the most evidenced based method to assess inpatient psychiatric patients for suicide risk? A literature review using CINAL and ProQuest databases was done to examine the state of knowledge on the topic of suicide risk assessment and prevention for psychiatric patients. The key words "psychiatric patients" and "suicide incidence", "suicide prevention", "suicide risk assessment", and "suicide risk assessment education" were used. Abstracts for research studies form the years for the years of 2006 to 2016 involving adults were reviewed. The National Clearing house was also searched for Evidence-Based Practice Guidelines.

Suicide Incidence

Evidenced also shows that the population cared for at the IPP is especially at risk for suicide. The statistics on suicide are staggering. De Santis, Myrick, Lamis, Pelic, Rhue and York (2015) found that in total, 75% of suicides reported to The Joint Commission as sentinel events since 1995 have occurred in psychiatric **s**ettings. A meta-analysis by Large and Lackersteen (2009) found that in the decade in which stricter guidelines for involuntary psychiatric admission were introduced in the majority of jurisdictions, national suicide rates increased from under 11 per 100,000 per annum to over 12.5 per 100,000 per annum. This demonstrates that suicide rates are currently on the rise.

Two studies demonstrated that patients with psychiatric histories are at an in increased risk for suicide. A literature review by Bolton, Gunnell, and Turecki (2015) found that people with mental health problems have a substantially higher risk of suicide and self-harm than that found in the general population. Groholt and Ekeberg (2009) found that of 71 persons who had attempted suicide, 79% had at least one psychiatric disorder (mean 1.7) at follow-up, most

commonly depression (46%), personality disorder (46%), and anxiety disorder (42%). Thus, the literature demonstrates that patients with a psychiatric diagnosis are at an increased risk for suicide.

Patients with medical problems are also at risk for suicidal ideation. An observational study by Lehuluante and Fransson (2014) involving prostate cancer patients showed a statistically significant relationship between suicide ideation and lower self-rated health-related quality of life and physical pain. Qin, Webb, Kapur, and Sørensen (2013) found that a physical illness significantly increased the risk of subsequent suicide **(**incidence rate ratios 2.13, 95% CI 2.07-2.18) with a substantially greater effect in women than in men. The elevated risk increased progressively with the frequency and recency of hospitalization and was significant for diseases occurring in all organs or systems of the body. Since the patients at the IPP unit have a combination of medical and psychiatric diagnosis much of the population on the unit is at risk for suicide.

Factors Related to Suicide Risk

Some of the factors that may be related to suicide risk are thwarted belongingness, perceived burdensomeness and acquired capacity. A study by Van Orden et al. (2008) included 153 adult clients from the Florida State University psychology clinic. These clients completed a self-rating questionnaire which rated levels of depression, desire for suicide, and capacity for suicide. The study also included suicide risk ratings through interviews with clinicians. The study demonstrated that depression, desire for suicide, and capacity for suicide were predictive of high suicide risk.

Suicide Prevention Techniques

Suicide prevention techniques are difficult to study because suicide is a relatively rare event and sample sizes have to be very large. A traditional strategy for suicide prevention for inpatients is formal observations. However, one literature review by Manna (2010) found that the efficacy of formal observation in reducing patient risk and providing therapeutic benefit remains unclear. To date, no randomized controlled studies exist for suicide prevention strategies.

Suicide prevention on an outpatient bases is also difficult to study due to poor reporting of suicide attempts. One study by Jacob, Scourfield, and Evans (2014) reviewed internet based suicide prevention programs. This study concluded that although the internet increasingly serves as an important medium for suicidal individuals and there is concern about websites that both promote and encourage suicidal activity, there is lack of published evidence about online prevention strategies. More attention is needed in the development and evaluation of such preventative approaches.

Three studies show that continued contact with the patient post discharge following an acute care admission, both by family and clinicians, positively impacts the care of suicidal patients. In a randomized controlled study by Sun, Chiang, Lin and Chen (2014), family caregivers of suicidal individuals who attended a psycho-education program had increased caring ability and more positive attitudes for their suicidal relatives. In a by study McFaul, Mohatt, and DeHay (2014) providing education on suicide prevention to primary care clinicians in a toolkit increased the clinicians' awareness, knowledge, and interest in suicide prevention. Another randomized control trial (Chen, Chen, Ho, Lee, Lin, & Chou, 2012) found that for outpatients, the risk of suicide reattempt was significantly lower in patients who received case management

follow up care than those who did not throughout a six-month follow-up period (hazard ratio = 2.93; 95% CI = 2.47-3.47).

One reason suicide prevention strategies are difficult to evaluate for effectiveness is that follow-up of patients once they leave the acute care situation is difficult. One study addressed this problem by reviewing coroners' reports of those who committed suicide in several areas of Montreal. Many inconsistencies were identified. The authors recommended that by adopting a standardized procedure for collecting information on cases of suicide, coroners could provide local decision makers with a more accurate portrait of the people who die by suicide in their area. Local adjustments may improve suicide-prevention strategies (Houle & Guillou-Ouellette, 2014). The same problem has been encountered at the IPP unit as information on suicide in the community is difficult, if not impossible to find or track.

Another promising approach to suicide prevention that is to train primary care physicians to recognize, treat, and refer patients with mental illness, (especially depression). However, there is evidence from one study that less than 12% of the family physicians surveyed reported comfort in their ability to recognize and treat depression in youth (Kutcher & Szumilas, 2008). Since the treatment of depression has been associated with decreased suicide rates and suicide attempts among youth, helping physicians provide effective early treatment of depression is an approach that targets a causal as well as modifiable risk factors.

Suicide Risk Assessment

Accurate suicide risk assessment can positively impact the care of suicidal patients. One observational study in the United Kingdom (UK) showed that psychosocial assessment and the resulting intervention following an index episode of self-harm was associated with a 51% decreased risk of a repeat suicidal episode in persons with no psychiatric treatment history and a

26% decreased risk in those with a treatment history (Bergen, Hawton, & Waters, 2010). This study provides evidence that even the process of assessing patients for suicide may decrease the incidence of suicide.

The Colombia scale, which is the basis of the assessment currently used at the IPP unit, is based in evidenced-based practice. For example, the Columbia scale puts patients with a history of previous suicide attempts at a higher suicide risk. An observational study by Greist, Mundt, Gwaltney, Jefferson and Posner (2014) found that a life time history of suicide attempt is predictive of suicide. However, evidence also shows that current suicide risk assessment practices are often inadequate in preventing suicide. A study by Bergen, Hawton, and Waters (2010) showed that 30% of patients who die from suicide had been seen and assessed by a health care provider within a month before their death. Moreover, a clinical guideline on suicide risk assessment shows moderate evidence that the Colombia scale is not recommended for suicide risk assessment as it was found to not be an accurate predictor of suicide (Emergency Nurses Association, 2012).

The Interpersonal Model may be used to improve suicide risk assessment (Brathwaite, Cukrowicz, Joiner, Van Orden, and Witte, 2010). This model proposes that the most dangerous form of suicidal ideation develops from simultaneous feelings of thwarted belongingness and perceived burdensomeness and the capacity to carry out a suicide attempt. According to this model, accurate assessment of suicide risk includes asking the patient about feelings of isolation, thoughts of being a burden to loved ones, and history of self-harm. A literature review on the need for belonging by Brathwaite and Leary (1995) supports the idea connectedness is indeed an important motivation for people and that the lack of connectedness has ill effects on mental and physical health and adjustment.

The Interpersonal Needs Questionnaire (INQ), the tool based on the Interpersonal Theory of Suicide, also shows evidence of being accurate. Byron (2011) notes that increasing the chance of identifying SI from 6% to 18% with the INQ. Although this increase may seem small, the INQ does increase the chances of identifying SI from 1in 20 to 1 in 5, which is a significant improvement.

Suicide Risk Assessment Education

Evidence shows that educating clinicians on improved suicide risk assessment techniques improves suicide risk assessment documentation. Two studies used vignettes to assess the impact of educating clinician about suicide risk assessment on documentation. A study by Berman, Stark, Cooperman, Wilhelm, and Cohen (2015) asked clinicians to assess hypothetical patients in vignettes. The results of the study showed a high variability in clinicians' rating of the patients' risk of suicide. When the clinicians were randomized into a group that received suicide risk assessment education and a control group, the documentation was significantly improved for the clinicians who were educated on new suicide risk assessment techniques.

A randomized control trial by Berman, Sullivan, Wilhelm and Cohen (2016) used vignettes and compared the clinicians' documentation with and without a reminder of their legal obligations in documentation. In this study, an experimental group received education about the legal guidelines for documentation of suicide risk, and the control group did not. Both groups were given vignettes to read about fictional patients and were asked to rate suicide risk. Surprisingly, the clinicians who were educated on the legal obligations rated the hypothetical patients at a significantly lower risk than those who had not had the education. The authors hypothesize that the clinicians increased confidence in their documentation techniques which decreased their need to overstate the risk. The weakness of this study was that it was an online

survey. It was difficult to deduce the meaning of the results as the authors of the study were not able to ask the respondents why they responded the way they did.

The literature review revealed that assessment of suicide risk impacts patient outcomes. The literature strongly supports the proposition that the population at the IPP unit is especially at risk for suicide. The literature also makes it clear that improvements need to be made in the risk assessment process. Additionally, there is beginning evidence that educating clinicians about assessment techniques can improve suicide risk assessment documentation. Finally, the literature demonstrates that weighing the patients' risk factors against the patients' protective factors and implementing the Interpersonal Model may improve the suicide risk assessment process.

Synthesis of Literature

The literature review revealed that there is a high level of evidence that the psychiatric patients at the IPP unit are at an increased risk for suicide. There is also a moderate level of evidence that the desire for suicide and the capacity for suicide are related to high suicide risk. There is a moderate level of evidence that family and clinical involvement about psychiatric care for suicidal patients does help prevent suicides. There is a moderate level of evidence that educating clinicians about improved suicide risk assessment techniques does help them feel more confident about the assessment process. There is also beginning evidence that the concepts in the Interpersonal Model are predictive of suicide risk.

Chapter 3: The Theoretical Model

Interpersonal Model

Clearly, suicide risk assessment at the IPP unit does not meet the current evidenced based guidelines or the competencies communicated by the American Psychiatric Nurses Association in 2008. The Interpersonal Model for suicide may be used in the process to improve the suicide risk assessment process at the IPP. The Interpersonal Model was developed by Thomas Joiner (2009). The model was developed to explain suicidal behavior and help clinicians treat suicidal patients with greater confidence.

The Interpersonal Theory proposes that suicidal desire comes from a sense of thwarted belongingness and from thoughts of perceived burdensomeness. The sense of thwarted belongingness arises when a patient's natural need for companionship is not met. The Interpersonal theory also states that the desire for suicide also comes from a sense of perceived burdensomeness. (Joiner, 2009)

Perceived burdensomeness is the sense that one's death is more beneficial to loved ones than one's life. Joiner's writing (2009) contains several examples of suicide notes in which patient's express feelings that loved ones are better off without them. Joiner (2009) suggests that clinicians attack this false perception by reminding the patient of their contributions to their loved ones. Since the desire arising from thwarted belongingness and perceived burdensomeness for suicide are predictors of suicide, they also make great therapeutic targets for clinicians Joiner (2009) suggests using interventions such as therapeutic language to help develop a sense of belongingness for the patient. Some examples of such language include statements such as "we're in this together" and "we'll figure this out together".

However, suicidal ideation alone is not a good predictor of suicide (World Health Organization, 2008). The Interpersonal Model is based on the theory that a patient develops a capability for suicide when he or she has become accustomed enough to pain through experience to overcome the natural instinct of self-preservation. The theory states that the most accurate predictors of suicide are a combination of suicidal desire and an ability to carry out suicidal plans. This model may lead to an improved suicide risk assessment tool for the staff at the IPP unit to use (see Appendix B). (Joiner, 2009)

Plan-Do-Study-Act

The model chosen for this process improvement project is the Plan-Do-Study-Act (PDSA) model (see Appendix A). Walter Shewhart, a pioneering statistician at Western Electric created the PDSA Cycle technique in the 1920s (Shewhart, 1931). Shewhart used the scientific method to test hypothesis. The scientific method uses cycles of Inductive and Deductive reasoning (general to specific) to test hypotheses. Shewhart's friend, W. Edwards Deming, a famous quality management guru, made the technique popular in the 1950s (Deming, 1994).

The PDSA Model is an appropriate framework for many quality improvement projects. This model works especially well when the process will take several tries at improvement to achieve the desired results (Shewhart, 1931). There are three questions that need to be answered while using the PDSA Model. The first question is: What are we trying to accomplish? The next question is: How will we know that a change is an improvement? The last question is: What changes can we make that will result in improvement? (Langley, Moen, Nolan, Nolan, Norman, & Provost, 2009)

In this process improvement project, the question of what we are trying to accomplish is a very important one. The main goal of this project is an improvement of the suicide risk

assessment process. This goal is significant because an accurate suicide risk assessment would help the unit put the right safe guards in place for those who needed it.

In using PDSA cycles to improve suicide risk assessment, it is necessary to decide what changes can be made that would result in improvement. According to the Interpersonal Theory of Suicide, an improved assessment would address the patient's feelings of isolation and perceived burdensomeness. Addressing these risk factors with a safety plan would result in greater safety for the patients at the IPP unit in allowing risk factors to be identified quickly.

It is also necessary to determine if changing the suicide risk assessment process is an improvement. This question will be answered by comparing the pre-intervention chart review of documentation of risk assessment to the post-intervention chart review. The intended outcome is that the post-intervention suicide risk assessments are much more comprehensive in addressing suicide risk factors than the pre-intervention suicide risk assessment. The number patients identified as high suicide risk and the number of suicide plans that are put into place will also be monitored and compared to the pre-intervention numbers. Since suicide risk may be underestimated at the IPP unit, an increase in those two numbers will indicate success at improving suicide risk assessment.

In the "Plan" part of the PDSA cycle, the problem is identified and researched. The scope of the problem is measured and the impact of the problem on patient outcomes is analyzed. Usually a literature review is done to learn more about the problem and to search for possible solutions. The literature review often reveals the best possible solution and how the desired outcome has been achieved. The data gathered is used to make predictions about the outcome of the improvement process. Planning also involves forming a team to assist in planning and implementing the project. This team needs to come to a consensus on the aim for the project. A

plan is than developed to reach that aim. The plan is than customized for the specific microsystem. The planning part of the cycle is a very important and usually the most time-consuming part of the cycle (Langley et al., 2009).

In the "Do" part of the PDSA cycle, the plan is implemented. First, the team implements the plan in a small sample size of the microsystem. The implementation of the plan includes the team educating staff and monitoring the quality improvement process (Langley et al., 2009).

In the "Study" part of the PDSA cycle, the results of the process improvement project are analyzed. Data on the use of the new protocol is gathered on the impact of the project. This data is compared to the predictions made in the "Plan" portion of the PDSA cycle. The team involved in the project is interviewed for feedback on what went well and what did not.

In the "Act" of the PDSA the necessary changes to the process are implemented. The cycle is than repeated as many times as necessary to achieve the desired results. The plan is implemented to a bigger and bigger sample size. The information that is gathered in the process is used to make improvements for the next PDSA cycle (Langley et al., 2009). In initiating this protocol, we will need to assess for any barriers to the utilization of the new assessment process and eliminate those barriers.

In summary, this evidenced based protocol will involve improving the suicide risk assessment at the IPP using the Interpersonal Theory of Suicide. This improvement project will involve using the PDSA Model of process improvement. Several cycles of the PDSA may be used to for this process improvement project.

Chapter 4: The Protocol

This project involves improving the suicide risk assessment in the IPP. The suicide risk assessment improvement process is currently in the "Plan" phase of the first PDSA cycle. As part of the planning phase of this project, a chart review was completed to analyze the current suicide risk assessment practices. A problem was found in that the assessment process was not done on all patients and did not identify all patients with risk factors for suicide according to the Interpersonal Model.

Implementing Change Using the PDSA Model

The steps involved in planning an improvement in the suicide risk assessment process using the PDSA model include forming a team, setting aims, establishing measures, selecting changes, testing changes, implementing changes, and spreading changes (Langley et al., 2009). A team of IPP staff to assist in improving the assessment process will be formed. This team could include the CNL, nurse managers, nurses, the staff educator, and information technology staff. This team will be instrumental in implementing the new suicide risk assessment tool and educating the staff about this new template.

Plan. First, the team will conduct a literature review to find an improved suicide risk assessment tool. Implementing this tool in the IPP will be the aim of this assessment improvement project. The team will then decide on the measures to be used. One example of a measure considered for use in this improvement project is the percentage of charts utilizing the new tool before and after implementation.

The next step is to assess the current suicide risk assessment process to select changes that need to be made. If possible, the suicide risk assessment process will be observed as it is completed by the nurses. A flowchart will be developed to map out the current suicide risk

assessment process and identify any potential areas for improvement (see Appendix C). The assessment will also include interviewing the IT specialist to assess what can and what cannot be changed in the EHR. Next, the new suicide risk assessment tool will be tested to discover the possible benefits and barriers to the change. This assessment will include interviewing the nurses to gage their perception about the assessment process. Once the barriers to change are eliminated, the new assessment tool will be implemented and the change in the assessment process will be spread throughout the IPP unit.

Do. For the "Do" portion of the process improvement project it is expected that the assessment method will be revised, in order to accurately identify patients who are at high risk for suicide. The revised assessment process will be taught to the nurses at the IPP including the rational for the change. The suicide risk assessment improvement team will disseminate the education about the improved suicide risk assessment protocol to all the staff. Posters will be placed in the work room and cards for nurses to wear on their badges may be developed. The plan is to utilize the nurse managers as champions to help educate the staff nurses on the new expectation of suicide risk assessment and documentation.

Study. For the "Study" portion of the process improvement project, the results of the staff education will be evaluated. Another chart review will be conducted. The percentage of charts in which the suicide risk assessment tool is correctly utilized will be analyzed before and after implementation. Results of this review will be compared to the results of the initial chart review. The staff will be interviewed about any barriers they are finding in performing the suicide risk assessment.

Act. The "Act" portion of the PDSA cycle would be the next steps for this process improvement project. This portion will include assessing how the suicide risk assessment

improvement process can be modified. Gaps in staff education will be identified and plans to fill in those gaps will begin to be developed. Any other barriers to the utilization of the suicide risk assessment template will be identified and illuminated.

Cost-Benefit Analysis

This process improvement project is expected to incur a low cost. The main cost includes educating the nursing staff. Some of each nurses' time will be needed to educate nurses on the revised suicide risk assessment process. Once the educational process is identified, prior to the project implementation, the time it takes to educate the nurses will be calculated.

Another factor to consider in regards to the cost-benefit analysis is the possibility of postponed discharges for patients who are assessed as a high suicide risk. Precautions would need to be put into place before a high suicide risk patient can be discharged. In this unit, there have been reported incidence of delayed discharge due to difficulty in resolving identified suicide risk factors. However, in some cases, length of stay may be decreased because the earlier a suicidal patient is identified as a high suicide risk, the earlier the safety plan can be initiated. Thus, it will be important to track any delays in discharge due to last minute identification of suicide risk factor identification.

Some benefits of this change in protocol are the ability to identify patient risk factors and protective factors for suicide earlier. This will help to focus care plans to eliminate the risk factors and utilize the protective factors in patient therapy. The protocol will also help formulate a safe discharge plan in a timely manner as the risk factors are removed and the protective factors are strengthened.

Resources and Challenges

The challenges to improving the suicide risk assessment process at the IPP unit include the apparent inability to change the electronic health record to include the INQ assessment tool. Thus, a new template called the Suicide Risk Assessment Template (see Appendix D) will need to be included as a part of the narrative charting. In addition, educating all three shifts of nurses may be more difficult. This makes having the staff "buy in" to the improvement process more challenging. Therefore, ensuring the sustainability of the process may also become a challenge.

The resources in the IPP include a staff that seems engaged and willing to learn. Another strength in this microsystem is the obvious concern of the staff at the IPP unit for the safety of their patients. Having a CNL to assist with the change in process is also a significant strength of the IPP unit. The IPP also has a significant number of experienced staff who are very familiar with the narrative documentation that the revised Suicide Risk Assessment Template requires.

In conclusion, the improvement of the suicide risk assessment is a feasible improvement process. Currently, the IPP is not meeting the competencies provided by the American Psychiatric Nurses Association. Therefore, improving the suicide risk assessment has been identified as a priority by the leadership at the IPP unit. The Interpersonal Theory of Suicide is a promising model for the improvement of this assessment process. Data will be collected on the use of the new Suicide Risk Assessment Template before and after implementation. The expected outcome is an increase in the percentage of charts in which the Suicide Risk Assessment Template is utilized.

Chapter 5: Clinical Evaluation

Evaluation of Protocol Implementation

The project of improving the suicide risk assessment at the IPP unit required utilizing the PDSA Model of process improvement. The impact of the protocol was than measured by comparing baseline and post implementation data. The sustainability of the project was predicted by assessing the strengths and difficulties of the protocol. The protocol was found to have limitations. However, the project was related to current healthcare trends and fulfilled some important Masters of Nursing in Science (MSN) Essentials.

Plan. Improving the suicide risk assessment at the IPP unit has greatly evolved through the process of implementing this project. A team consisting of the CNL, the CNL student, and a staff nurse in the residency program was formed. The team evaluated the suicide risk assessment process and conducted a literature review on the current findings in suicidality. The current process was found to be deficient because although the Columbia Scale identified patients who were at high risk for suicide, the specific risk factors that make patients suicidal were not identified. Identifying specific suicide risk factors for each patient is important because it allows the interdisciplinary team to focus care planning and discharge planning toward eliminating those risk factors. The Interpersonal Theory of Suicide (Joiner, 2005) was found to be evidenced based as the result of this literature review.

The Interpersonal Needs Questionnaire (INQ), which was the assessment tool developed along with the theory was also found to be evidenced based (Byron, 2011). The INQ is a measurable tool, allowing for straightforward data gathering. At first, the plan was to incorporate the INQ into the EHR. However, in interviewing the IT specialist and the manager at the IPP, it became evident that hospital policy makes it difficult to modify the EHR. These interviews also

revealed that the nurses in the IPP are accustomed to narrative charting instead of check box tools like the INQ because narrative charting better describes the unique patient population. Instead, the staff nurse and the CNL student modified the Suicide Risk Assessment Template to reflect the Interpersonal Theory of Suicide (see Appendix D). This template allowed nurses to use narrative charting to describe patients' risk and protective factors for suicide (see Table 1). The template was than approved by the CNL.

Table 1

Risk and Protective Factors for Suicide

Risk Factors	**Protective Factors**
Psychiatric diagnosis	Internal (*i.e. Ability to cope with stress, religious beliefs, frustration tolerance, absence of psychosis*)
Key Symptoms	External (*i.e. Responsibilities, relationships, ect.)*
Suicidal Behavior *i.e. Hopelessness, low self-esteem, ect.)*	
Exposure to suicide	
Precipitant/stressors	
Acquired capacity	
Perceived burdensomeness	
Isolation	

Do. In the "Do" portion of the PDSA cycle, the new Suicide Risk Assessment Template was posted onto the organization's intranet website. This template was implemented instead of an assessment tool due to difficulties in modifying the EHR. These difficulties included hospital policy and the preference of the staff at the IPP to use narrative charting instead of check box charting. The unit was small enough that a pilot implementation stage was not required. A series of educational sessions for staff about the new template were developed by the CNL student and the staff nurse with the CNL's input. The educational sessions were conducted by the CNL

student and the staff nurse during two staff meetings. In addition, two lunch and learn sessions were conducted for staff members who expressed interest in learning more about the Interpersonal Theory of Suicide. These additional sessions included vignettes to help staff practice assessing patients for suicide risk which has been validated as an evidenced based method to improve identification of individuals at risk for suicide (Berman, Stark, Cooperman, Wilhelm, & Cohen, 2015). A note to remind nurses to assess patients risk and protective factors was also put in the charge nurses log book on two occasions.

Study. Data on the utilization of the new template was collected after the implementation of the new template through a chart review. This data was compared to the pre-implementation data on the percentage of charts that had risk factors and protective factors identified (see Table 1 and Appendix D). Only minimal improvement was observed as the percentage of charts utilizing the template started at 38.5%, increased to 48%, but then decreased again to 37% (see Appendix E). As part of the PDSA cycle, it was necessary to reassess why the intervention was not working. The staff was interviewed in one-on-one meetings to assess barriers to the use of the Suicide Risk Assessment Template. The recurrent theme in these interviews was that most of the nurses did not remember where the template was located and how it was to be utilized. Seeing a demonstration about the template was not adequate for staff to remember where to find the template and how to use it.

Act. Time was then spent reinforcing the education on the Suicide Risk Assessment Template to the nurses on a small group and one-on-one basis since the main barrier to using the tool was not knowing how to access it. The importance of accurately identifying risk and protective factors for patients was emphasized so that nurses would see the tool as useful. Data

on the utilization of the Suicide Risk Assessment Template continued to be collected after these steps were taken.

Comparison of Baseline and Post Implementation Data

So far, the data points do show moderate impact (up from 38.5% to 52% utilization) of educating staff about using the Suicide Risk Assessment Template (see Appendix E and F). One of the learning experiences in this process was realizing that changing a process is very unpredictable. Staff interviews will continue to assess any further education needs.

Summary of important successes/difficulties

One of the difficulties with the implementation of the protocol was obtaining staff "buy-in". In conversing with the management at the IPP, it soon became clear that hospital policy makes modifying the EHR by implementing the INQ assessment tool difficult. The consensus was that education about suicide risk assessment had recently taken place and that this education was adequate to provide nurses the abilities to implement a safety plan for patients admitted at the IPP. However, there was some interest in determining where a patient's suicidal ideation comes from and how this knowledge could be used to assist the interdisciplinary team in individualizing a patient's care and discharge plan.

The task of assembling a team to assist in the implementation of the Suicide Risk Assessment Template also took some unexpected turns as some of the staff approached about assisting in the project were unavailable for various reasons. However, a staff nurse in her residency program volunteered her time. This staff member was instrumental in providing nursing perspective on the project. The CNL at the IPP was also a great resource with the outcome of placing the Suicide Risk Assessment Template into the organization's intranet website. It was discovered that the process of making a template available on the organization's

intranet website was very simple and an IT specialist was not required. The CNL also provided guidance by editing the new template as well as the education sessions used to introduce the new template at staff meetings.

Educating the staff about utilizing the Suicide Risk Assessment Template was not as simple as expected. Presenting the template at staff meetings was not enough to make the process improvement "stick". Improvement in the utilization of the template was only noted after time was spent reinforcing the education with the nurses in small groups and one-on-one meetings. The lunch and learn sessions and staff interviews proved helpful in the education process.

Project strengths/weakness/sustainability

The strength of the protocol is that it has the potential to impact care planning and discharge planning. This protocol allows risk factors and protective factors to be identified earlier. This allows risk factors to be illuminated and protective factors to be strengthened. The weakness of the protocol is that the impact of the protocol is very difficult to measure. The template is not a tool with a numeric result. Therefore, the Suicide Risk Assessment Template does not necessarily measure which patients are high or low risk for suicide. Some weaknesses of using such a narrative template are that narrative charting is difficult to track and relies on the memory of the nurse with no decision support available. However, it does identify patients' risk and protective factors. In time, the template may lead to modifying the EHR by implementing the INQ. The protocol has the possibility of being sustainable if staff "buy-in" can be maintained through emphasizing the importance of identifying risk and protective factors for the patients.

Relationship to other evidence/healthcare trends

One important task of the CNL is to stay current on new research. Staying abreast of emerging research that applies to the microsystem is required to keep practice evidenced-based.

This protocol is based on the Interpersonal Theory of Suicide, which is a new and evidenced-based way to approach suicidality. Therefore, the protocol was related to current healthcare trends.

Limitations

The biggest limitation of this protocol is the inability to alter the EHR. Having to rely on a narrative template made collecting data very difficult because narrative charting is difficult to quantify. Another significant limitation to the project was time constraints as little time was left for reinforcing the education. This project was also limited in that it only involved improvement in the documentation of the assessment. Therefore, while this protocol has the potential to improve patient care, the impact of the protocol is difficult to measure.

Reflection on enactment Masters of Science in Nursing Essentials

This protocol helped meet some important MSN Essentials (AACN, 2007). The project required assuming a leadership role of the interdisciplinary team (Essential III, Competency 2). The protocol required the CNL student to assess the microsystem and identify a need for improvement in suicide risk assessment. The CNL student was than required to form a team for process improvement. The CNL student led this team in a literature review to identify current trends in evidenced based practice in the area of suicidality. Leadership was also required in developing a new protocol for suicide risk assessment. The CNL student gained experience in presenting education on the new suicide risk assessment protocol to large groups as well as educating staff in small groups and in one-on-one meetings. Finally, the CNL student's leadership was required in gathering and analyzing data on the impact of the new protocol. This assessment led to adjustments to how the education on the new protocol was presented.

The project also required the use of technology to disseminate healthcare information (Essential V, Competency 7). Several tools were used in presenting education on the new Suicide Risk Assessment Template to the staff at the IPP. The protocol also utilized the organizations intranet website to make the template available to the staff. Overall, the process of creating this protocol has been a valuable learning experience for the CNL student.

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Appendix A

The PDSA Cycle for the Suicide Risk Assessment Process

Plan
- Chart review to find inadequacies in current assessment
- Find improved tool
-Assemble process improvement team

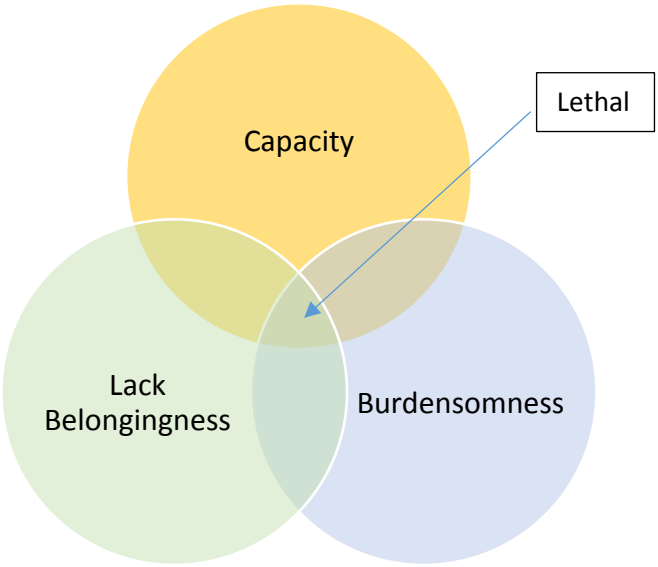
Act
- Necessary changes identified

Do
- Educate staff
- Document any problems/observations

Study
- Post-intervention chart review
- Process improvement team interviewed for feedback

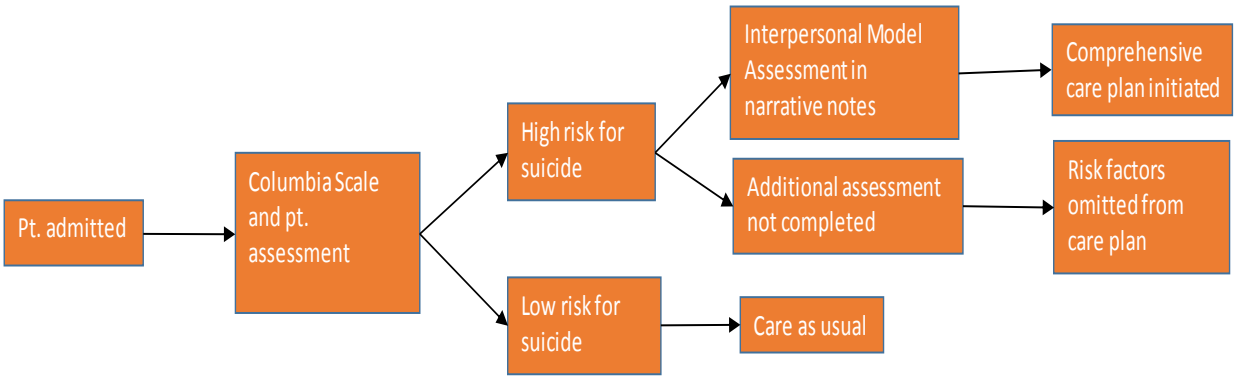
Appendix B

The Interpersonal Theory of Suicide



Appendix C

Current Suicide Risk Assessment Flowsheet



Appendix D

Template for Suicide Assessment Progress Note:

Risk factors:

- Psychiatric diagnosis
- Key symptoms (*i.e. Anhedonia, Impulsivity, Hopelessness, Anxiety/panic, Global insomnia, Recent substance abuse, Command hallucinations, Sense of feeling trapped, Hopelessness, Low self-esteem*)
- Suicidal behavior (*i.e. History of prior attempts, Recent suicide attempt, Self-injurious behavior*)
- Clustering/ exposure to suicide (*i.e. Family/friend history of suicide*)
- Precipitants/stressors (*i.e. Humiliation, Shame, Despair, Ongoing medical illness, History of abuse/neglect, Recent substance abuse, Homelessness, Incarceration, Unemployment, Family conflict, Seasonal variation*)
- Acquired capacity (*i.e. Firearms/other means, Elevated physical pain tolerance, Combat exposure*)
- Perceived burdensomeness (*i.e. Perceived expendability, feeling like a burden to loved ones, Self-hate*)
- Isolation (*i.e. Self-reported loneliness, Lives alone, Few social supports, Loss through death/divorce*)

Protective factors:

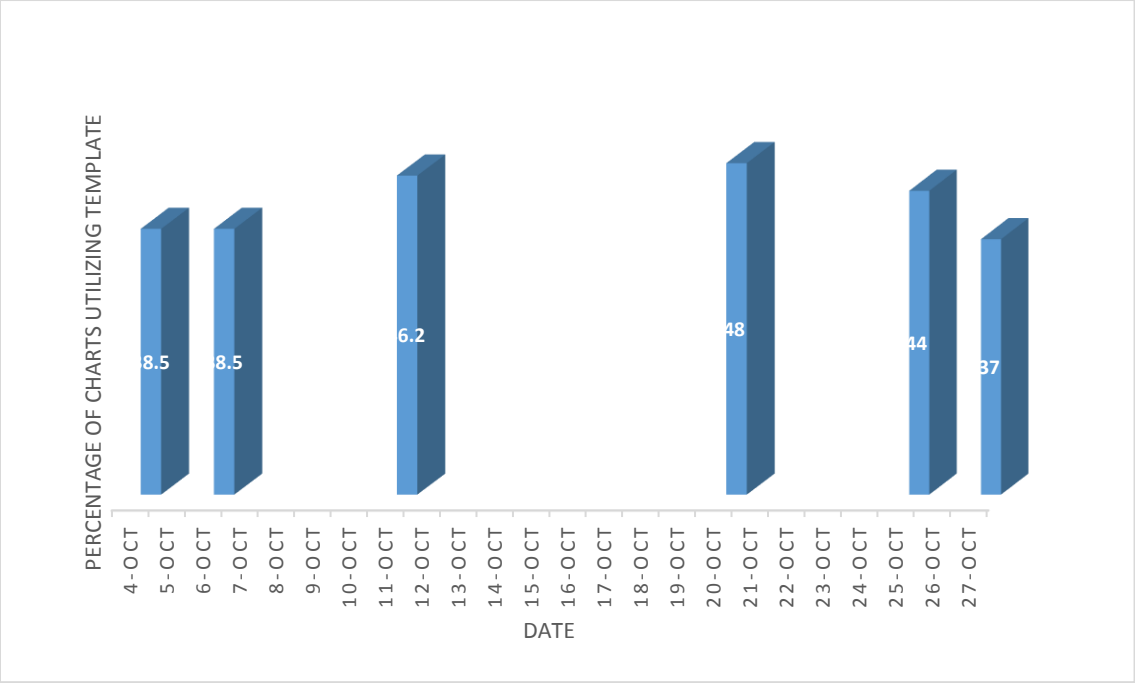
- Internal (*i.e. Ability to cope with stress, Religious beliefs, Frustration tolerance, Absence of psychosis*)
- External (*i.e. Responsibility to children or beloved pets, Positive therapeutic relationships, Social supports*)

Instructions:

For new patients, all areas should be addressed. For ongoing assessment, review what was identified previously, focus on what has changed. If there is time, some of this could be covered with the patient during face-to-face handoff. To use: Copy the template above, paste into behavioral med progress note, delete text in italics, and add patient specific details.

Appendix E

Pre-Implementation Data



Appendix F

Post-Implementation Data