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Hahn School of Nursing and Health Science

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by

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IMPROVING SUICIDE RISK MANAGEMENT IN MILITARY PRIMARY CARE

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Abstract

Background: In the military, completed suicides and attempt rates have risen across the services since 2001 by 82% per 100,000 in spite of various intervention programs. The literature suggests that absent and inadequate suicide assessments may be part of the problem. Primary care providers are often not prepared for risk assessment and management of suicidal patients.

Aim/Purpose of Project: The project sought to improve the consistency of providers in conducting adequate risk assessments and providing crisis hotline information to patients who were cleared to return home after an encounter, as required by NPSG 15.01.01.

Project Plan Process: This evidenced-based project was guided by the Knowledge to Action Framework for translation of relevant evidence and made use of PDSA cycles.

Data were collected and analyzed in a pre-intervention and post-intervention fashion.

The intervention consisted of an hour-long interactive educational presentation. It was delivered to many of the primary care providers at a military treatment facility.

Composite NPSG 15.01.01 trends for the three elements of performance were tracked.

Results: Following the intervention, the highest composite score for suicide risk assessment compliance was achieved in the areas of the medical center that were targeted. Compliance stood at 93.3% in the month that the intervention concluded.

Conclusions and Implications: Inexpensive and brief educational interventions aimed at primary care providers in a military hospital improved provider performance. Also, a project focused on improving suicide risk assessment can shift institutional culture.

Keywords: Suicide, risk assessment, NPSG 15.01.01, provider education

Improving Suicide Risk Management in Military Primary Care

Suicide is a nationwide public health problem. The Centers for Disease Control and Prevention reported that suicide ranks as the 10th leading cause of death among all ages as of 2010 (Heron, 2013). The evidence suggests that one of the major factors influencing this problem is that suicide risk assessments are either not performed or are inadequately performed (Feldman et al., 2007; McDowell, Lineberry & Bostwick, 2011; Schmitz et al., 2012). Providers are often not prepared to conduct effective risk assessments. Suicide is a complex problem, and reducing suicide incidence requires a sophisticated solution of which adequate screening in the hands of well-trained providers is a crucial component.

Background and Evidence for the Problem

General Evidence

In the military, completed suicides and suicide attempt rates have risen across the services since 2001 in spite of various intervention programs. The suicide rate per 100,000 service members stands at 18.7 as of 2013 (Smolenski et al., 2014), up from 10.3 in 2001 (Ramchand, Acosta, & Burns, 2011). This reflects an increase of 82% over that period. (See Figure 1.) In spite of the goal of the Centers for Disease Control and Prevention to reduce suicide rates by 2020, current trends suggest that the problem is growing worse rather than better even in the general population (U.S. Department of Health and Human Services, 2014) with approximately 41,000 suicides per year in the United States (Centers for Disease Control and Prevention, 2015). Suicide also accounts for 1.5 million years of potential life lost annually (WISQARS, 2013). This is a staggering loss of productive years of life. In fact, suicide accounts for the fourth greatest

cause of years of potential life lost after malignant neoplasms, heart disease and unintentional injury (WISQARS, 2013). While the loss of life is tragic, suicide has an economic effect on society. The American Foundation for Suicide Prevention estimates that as of 2015, the annual cost of suicide is approximately \$44 billion (ASFP, 2015). Clearly, this is problem worthy of attention.

The military health system serves both active duty and civilian dependent patients. Therefore, civilian and military data are of value in addressing this issue at a military treatment facility. The data from within and without the military suggest that health and policy leaders have much work still to do to have an impact on this problem.

Primary Care as an Area of Opportunity

It can be asserted that primary care providers are the first line of defense in a comprehensive health care strategy to prevent suicide. Between 45-66% of suicides had seen a primary care provider within 30 days (Luoma, Martin, & Pearson, 2002). This is especially interesting given that only 20% of suicides had seen a mental health provider within 30 days of death (Luoma, Martin, & Pearson, 2002). It is estimated that 76% had personal contact with a primary care provider within one year and that 90% had some form of contact with a primary care provider within one year (Luoma, Martin, & Pearson, 2002). These are crucial elements of information since they suggest that in primary care provider offices, a bastion of opportunity to identify and treat patients at high risk of suicide exists.

Primary Care Providers Do Not Adequately Screen

In spite of the need for adequate screening in primary care, there is evidence that these providers simply do not broach the topic of suicide with vulnerable patients because

they are uncomfortable with the discussion (Feldman et al., 2007). This problem is sizable; one article suggested that as much as 64% of depressed patients are not assessed at all (McDowell et al., 2011). Another study suggested that even when primary care providers were likely to believe that a patient was depressed or very depressed, they were still unlikely to perform a suicide risk assessment (Hooper et al., 2012). Schulberg et al. and Bartels et al. also note that among primary care providers, there are low rates of inquiry and detection of suicidal thinking and behaviors in their patients (2004; 2002). A study by Feldman et al. found that physicians only addressed suicide in 27% of the cases that it should have been addressed unless prompted by the standardized patients in the study (2007). In another study by Nutting et al., 60% of real patients with suicidal ideation reported that following their evaluation, they had not been asked about suicide at all (2005). This leads to an uncomfortable conclusion: primary care providers are not adequately conducting suicide risk assessments and some of the patients seen by those providers are going on to die by suicide.

As the American Psychiatric Association practice guidelines for suicide assessment note, oftentimes the only indication that a patient is suicidal is that they schedule an outpatient visit and the visit is only rarely going to be for depression or suicidal thinking outright (American Psychiatric Association, 2003). Patients will provide other reasons for coming to their primary care providers. However, on the basis of the statistics, they may very well leave that provider treating the wrong problem.

As already noted, there exists an education and training gap. But there are other issues. Feldman et al. note that providers oftentimes struggle with a lack of confidence and do not perform risk assessments because they do not believe they are prepared to (2006).

The same researchers suggest that primary care providers wrestle with concerns about time management in a busy clinic. This is a point well taken in this high-speed and high-volume managed care environment.

Joint Commission Requirements

The Joint Commission, a leader in patient safety science, understands the scope of the suicide problem and, under National Patient Safety Goal 15.01.01, requires hospitals to identify patients at risk irrespective of where they are seen (Joint Commission, 2015). While universal screening for suicide is not currently recommended in primary care by the United States Preventive Services Task Force (USPSTF) (O'Connor, Gaynes, Burda, Soh, & Whitlock, 2013), the need to screen patients at risk by way of an emotional or behavioral complaint is unquestionable (McDowell et al., 2011).

While the original focus of the Joint Commission had been on inpatient suicide prevention, the standards for this National Patient Safety Goal actually apply to all areas of the hospital where a patient with an emotional or behavioral disorder may be seen (Joint Commission, 2015). This includes in both mental health clinics and in the primary care clinics where patients with mental health issues are frequently seen.

There are three elements of performance for this National Patient Safety Goal:

- 1) Providers must conduct a risk assessment that identifies specific patient characteristics and environmental features that may increase or decrease the risk for suicide in any patient being seen for an emotional or behavioral concern.
- 2) The providers must address the patient's immediate safety needs including addressing the most appropriate setting for treatment for the patient.

3) When the patient at risk for suicide leaves the care of the provider, he or she must provide suicide prevention information (such as a crisis hotline) to the patient and his or her family (as appropriate).

One concern that had been expressed in the past was that assessing for suicide risk would plant the seed for self-harm in a patient who did not yet have suicidal ideation. This notion has been handily discredited a number of times over the last several years (Crawford et al., 2011). Therefore, the problem is not that suicide risk assessments put patients in jeopardy, but that the well-documented failure to conduct such assessments puts patients at risk (Feldman et al., 2007).

Evidence of the Problem in the Target Setting

The Naval Medical Center in San Diego, California, is a Joint Commission-accredited hospital. It is the largest military treatment facility in the U.S. Navy. As such, it hosts a robust quality management program that tracks and trends suicide risk assessment in accordance with the Joint Commission Hospital Accreditation Standards. In order to comply with Joint Commission standards, hospital leadership oversees an internal auditing process. There is quarterly reporting to the Directors, the Deputy Commander and the Commanding Officer at the medical center. A systematic sample of eligible charts is selected and then the members of a trained team review these charts to compare the documentation with Joint Commission Standards. While this is an internal audit, these documents are open to the Joint Commission during surveys. Members of the survey team take interest in hospital compliance trends for this goal. These trends are valuable as evidence of the performance of providers conducting suicide risk assessments and performing initial management of patients found to be at risk.

Historically, compliance with the elements of NPSG 15.01.01 has been far less than desired. For the period of ten months prior to the start of the intervention, composite compliance for the three elements of performance for this goal has been 79.3%. Given the importance of adequate screening for vulnerable patients, there is clearly room to improve. There is also evidence of wide variability in the data over the last several years suggesting that some providers are far more adept at meeting the elements of performance than others and that the monthly trend depends heavily on which providers' charts are selected for review.

Most efforts to date have focused on educating senior leadership about the lack of adequate risk assessment in the hope that the leaders would take the message to their clinicians in the various primary care clinics and that the clinicians would improve practice. This has not happened. It is likely that this 'trickle down' approach is simply ineffective in the context of large amounts of information related to a variety of clinical and non-clinical issues that flow between leaders and clinicians regularly. This problem is not being solved because the information about the problem's existence is likely diluted in a sea of other issues.

Practical Evidence-based Solutions to the Problem Considered

Given that suicide is a complex problem, a host of solutions were considered to address the issues of inadequate screening and insufficient provision of crisis line information to those for whom it was indicated. Three of the most prominent solutions will be discussed here briefly. Ultimately, the solution selected consisted of a synthesis of two of these alternatives.

The first alternative involved arranging for commercial training which is available through organizations such as the American Association of Suicidology and the Suicide Prevention Resource Center. These training sessions could be conducted locally through a trainer who would travel to San Diego. They could also be conducted through a ‘train the trainer’ format that would require a member of the hospital staff to attend a workshop elsewhere in the country. Finally, this alternative could be achieved through online training available through these organizations. The training is conducted by experts who are well acquainted with not only the topic, but with primary care providers and the military health care system more broadly. There is evidence in the literature specifically mentioning these organizations and suggesting that their workshops are effective in changing clinician attitudes and behaviors (Schmitz et al., 2012). These modalities would have cost between approximately a few thousand dollars and tens of thousands of dollars depending on which training options were selected and how many providers were trained. Given budget constraints, the expense involved made this the less optimal choice.

The second alternative considered would involve a Grand Rounds type of training conducted by mental health staff members for the benefit of the primary care providers. The costs would be substantially lower. Moreover, the evidence suggested that such training, if properly conducted, could be effective in changing provider behavior and attitudes regarding suicide risk assessment (McNiel et al., 2008; Oordt, Jobes, Fonseca, & Schmidt, 2009).

The final alternative considered would have required a policy change throughout the primary care clinics. This change could require the use of an evidence-based suicide risk assessment screening tool by the primary care providers when seeing patients who

present with an emotional or behavioral complaint or when the providers suspect an underlying emotional or behavioral disorder. While standardization of practice is desirable when the practice is rooted in evidence, intent to standardize may be insufficient to effect a change. The policy manual of the primary care clinics had not heretofore mandated the use of any particular instrument. However, it had required conducting suicide risk assessments. Interestingly, as the evidence-based practice team developing this program began to interface with hospital leadership, the primary care clinics were changing their policies (with the help of mental health) to require the use of a variant of the ‘SAD PERSONS’¹ mnemonic by providers when seeing patients with mental health concerns. Given the history, this change by itself is not expected to have the desired impact of improving suicide risk assessment in the primary care clinics. Furthermore, the use of this mnemonic is not well supported by the literature as an effective means of identifying patients at actual risk of suicide (Bolton, Spiwak & Sareen, 2012; Saunders, Brand, Lascelles & Hawton, 2014). However, it suggests that the leadership is amenable to changing policies and that this issue is considered worthy of attention and improvement. Fortunately, the policy and the use of SAD PERSONS would not preclude successful training or the use of evidence-based screening tools by the primary care clinicians. (While SAD PERSONS is frequently used as a documentation tool and a way for providers to give thought to factors that ought to be considered when estimating suicide risk in vulnerable patients, there is evidence that if used alone, it may actually create a false sense of security for providers regarding patients that are at real risk, potentially placing the patient at greater risk (Birnbaumer, 2013).)

Supporting Evidence for the Intervention

As this is an evidence-based project, a discussion of the strength of the relevant evidence base is in order for the core elements of the intervention. A comprehensive review of the literature was conducted.

There are ways for primary care providers to work efficiently and adequately to accomplish risk assessments and initial management. Suicide risk assessments can be performed by primary care providers appropriately with the help of clinical decision supports such as high quality clinical practice guidelines. Many researchers and experts have also come forward suggesting training for primary care providers. Brief training has been shown to have a significant effect on attitudes and practices of providers regarding suicide risk assessment as long as 6-months following training (McNiel et al., 2008; Oordt et al., 2009). However, even when such training is conducted, While et al. and others suggest that refreshers are needed periodically to maintain attitudes, behaviors and performance (2012).

While both of the studies referenced made use of quasi-experimental designs making them Level III studies, they reflect the best available evidence at present. In spite of a lack of meta-analyses and randomized control trials on the subject of brief provider education, the American Association of Suicidology, a respected leader in the field, openly recommends and endorses brief training as an effective method of improving suicide risk assessment based on what is currently known (Schmitz et al., 2012). Given that suicide risk assessment for vulnerable patients is also required by the Joint Commission as a standard of accreditation, it is evident that some solution must be utilized to make improvements. That solution must be rooted in the best available

evidence even when the evidence base is not founded on Level I studies. To simply wait until higher quality studies is available before working to combat the problem of suicide may very well be part of why this problem continues to grow worse. Action based on the best of what is known is the most ethical approach.

Screening instruments were an important part of the education provided to the participants. The relevant literature suggests that the use of high quality screening instruments improves the detection of suicidal ideation (Haney et al., 2012; Horowitz & Ballard, 2009; Uebelacker, German, Gaudiano, & Miller, 2011; Wintersteen, 2010). Ultimately the hope is that improving suicide risk assessments will make a difference in suicide behavior rates and suicide rates. Beyond this, a number of organizations have long called for effective suicide risk assessments to be conducted when indicated in the expectation that through improved suicide risk assessments, the serious public health problem of suicide can be mitigated.

Factors Making the Intervention Appropriate in the Setting

Cost is a critical factor to consider. This is especially true given an increasingly austere economic climate and the budget constraints on government programs. Thus, the fact that many high-quality screening tools are available at no cost is a positive factor. Moreover, in-house Grand Rounds training can be performed with minimal interruption to clinic operations and at a significantly lower cost than the commercially available training.

All of the necessary resources were available for this program. Screening tools are widely available at no cost. The hospital employs dozens of mental health providers with a firm grasp of the material and the issue who are highly qualified to teach the providers

in primary care and to support those that conduct such teaching. Furthermore, given the sheer size of the facility and its status as a teaching hospital, rooms for presentations and trainings are plentiful. There were some incidental costs to the facility such as paper for the pre-tests and post-tests. (The primary author purchased a laminator and laminating supplies at his expense in order to make badge cards with clinical practice guideline reminders to dispense to project participants.) However, costs to the hospital were minimal and already covered under the facility's annual budget. Therefore, there were no critical resource impediments and the project was extremely lean.

The project was politically advantageous. Lower cost programs are attractive to leaders with limited financial resources. Also, given that the program had impact by making improvement in an important area, and the fact that leaders are promoted and rewarded based on their effectiveness in sustaining and improving programs, this project was highly desirable by stakeholders. Efforts that improve regulatory or accreditation compliance are well regarded at Naval Medical Center San Diego. Thus, the political atmosphere was generally receptive to this program.

Other Evidence-based Strategies and Best Practices Incorporated in the Training

The PHQ-2/PHQ-9 system for suicide risk assessment was taught since it has good sensitivity and excellent specificity, takes little time to administer and conforms to the requirements of the NPSG 15.01.01 auditing within the hospital (Uebelacker et al., 2011). This was introduced along with the VA/DoD Clinical Practice Guidelines on the Assessment and Management of Patients at Risk for Suicide, a high-quality set of guidelines produced using the latest evidence by a well-qualified team of experts. Given that suicide is more likely to be detected as a component of a depression screening and

given that the United States Preventive Services Task Force recommends universal screening for depression when staff-assisted care supports are in place (2009), incorporating the PHQ-2/PHQ-9 into the training session was appropriate.

While the Joint Commission does not require a particular risk level system, the VA/DoD system is intuitive and straightforward, making it ideal for busy clinicians and for a brief educational intervention. It allows patients to be categorized as ‘High Acute Risk,’ ‘Intermediate Acute Risk,’ and ‘Low Acute Risk.’

It is important to remember that suicide is a low-base rate behavior. As such, Bryan and Rudd point out that prediction of which patients will or will not go on to die by suicide is not the goal because to date, not enough about the phenomenon of suicide is known to make such predictions accurately (2011). There is no instrument, in spite of many being available, that can accurately predict who will complete suicide in all cases. Instead, clinicians were taught to work to identify patients at higher risk and then to provide a level of care consistent with that risk. The standard of care is an adequate suicide risk assessment and initial management in the most appropriate setting.

It was considered beyond the scope of the presentation to explore in depth ‘means restriction’ and ‘means restriction counseling’ because it would have increased the length and time requirements beyond those reasonably available. However, the providers were strongly encouraged to learn more about these concepts since means restriction has a robust evidence base suggesting that it is effective in reducing suicide rates (Bryan, Stone & Rudd, 2011). The providers were encouraged to learn more about means restriction counseling (as a way to accomplish means restriction) and were urged make it a part of their clinical repertoire.

It is well-established that ‘no-harm contracts’ are *not* effective at reducing suicide attempt rates, suicide rates and do *not* reduce clinician legal liability in the event of a patient suicide. (Bryan & Rudd, 2011; Kelly & Knudson, 2000; Rudd et al., 2006). They were also advised that the word “contract” suggests that the provider is more concerned with a potential legal process than with the clinical process and the patient (Miller, 1999). Thus, the training stressed these points in an effort to convince the providers to abandon interventions that the evidence has established are ineffective in favor of strategies supported by the evidence, such as safety plans.

An in depth treatment of safety plans was beyond the scope of the presentation. However, they are also regarded as an empirically supported best practice by a number of experts even while the evidence base grows (Bryan & Rudd, 2011). In short, it is now believed they help reduce suicide and suicidal behaviors. As such, they are preferable to no-harm contracts. It is not only more important to help the patient decide what to do in a crisis (get help) than not do (suicide). Ultimately, it is preferable to do something believed to be effective (safety planning) than something established by the literature as patently ineffective (no harm contracts). Given that they are not complex, clinicians were encouraged to learn more about how a well-tailored safety plan developed in collaboration with a patient may save the patient’s life.

Documentation That is Aligned with Evidence-based Care

For any clinician concerned about his or her legal position in the context of the care he or she provides, that legal position is substantially improved when good care is matched with good documentation. Thus, basic documentation requirements were covered in this presentation.

An exhaustive treatment of documentation was beyond the scope of this presentation. However, the presentation focused on the elements of performance sought by the Joint Commission during surveys and by the hospital leadership in preparing for such surveys.

The SAD PERSONS scale was developed by Patterson and colleagues for organizing and evaluating patient risk factors (1983). It is clear that in this tool there are very few risk factors compared to those covered in the VA/DoD clinical practice guidelines. This fact along with the work of Saunders and colleagues and others that suggest that it is a poor patient management tool mean that no clinician should use this scale as a last word on a patient's real risk level (2014). However, as Driscoll and colleagues note, it is easy to remember and is approved by the Joint Commission for documentation as evidence that providers gave consideration to relevant risk factors as required by NPSG 15.01.01 (2008). In short, this scale is a useful and efficient way of documenting that a provider gave thought to risk factors for patients that are regarded as low risk on the basis of screening.

One variant of this scale, SAD PERSONAS, is approved by NMCS D hospital policy for use in documentation. Thus, the clinicians were taught that the record of all encounters of any patient evaluated for an emotional or behavioral concern should, at a minimum, have this scale with a corresponding number assigned based on the patient's specific collection of risk factors in addition to evidence that the provider explored suicidal ideation, plan, preparation and intent.

The educational intervention also included vignettes. The providers were asked to consider case examples of patients with very low risk and more moderate risk and not in

need of emergent hospitalization. Beyond making the presentation interactive, the case studies allowed the providers to concretize what they learned.

Designated Process Objectives

An important aspect of any evidence-based practice project is the clarity and appropriateness of the process objectives. As such, this project required monitoring of process objectives to ensure that feedback could be provided to the EBP team deploying the project continuously and that the end outcome objectives would be achieved.

The training sessions closed with individual quizzes that tested knowledge conferred to the target primary care providers. This enabled measurement of the effectiveness of the training. It created opportunity for the trainer to address knowledge gaps and to make corrections and improvements in subsequent cycles of the presentation. Understanding and retention of the most critical factors in suicide risk assessment were more likely to be achieved this way.

Setting Selected for the Intervention and the Project Plan Process

While there are dozens of clinics affiliated with the medical center, the project was primarily focused on the Directorate for Medical Services. This directorate is responsible for the Internal Medicine clinics and the Emergency Department. The leadership of both of these areas had expressed interest in improving their providers' performance as it regards suicide risk management. The authors developed a training intervention based on the VA/DoD Clinical Practice Guidelines on Suicide Assessment. The primary author also developed a clinical decision support tool small enough to attach to hospital identification badges as a reminder of the training and of the guidelines. Providers were recruited in small numbers at first in order to test out the intervention and

make improvements in PDSA cycles. The cycles grew to target the residents and interns of one entire internal medicine clinic and then eventually to target all of the hospital's providers at Grand Rounds. The bulk of the providers that attend hospital-wide Grand Rounds are from Internal Medicine since this department is responsible for hosting Grand Rounds at the medical center. Fifty providers attended Grand Rounds.

While Internal Medicine providers have a scope that goes beyond primary care, in many ways they handle primary care issues for some of the facility's most complex patients. Moreover, their documentation is subject to review by the auditing team and many of their patients present with mental health issues also. Thus, these providers were selected as an appropriate and willing target for the intervention.

Results

Following the end of the intervention, the highest composite compliance score for the Directorate of Medical Services (responsible for the Emergency Department and the Internal Medicine Clinics) was achieved at 93.3%. (See Figure 2.) This result met the stated goal at the beginning of the project that by the intervention's end, composite compliance would be above 90% for these areas of the hospital. At no point in the previous year had composite compliance stood above 90%.

Program Outcomes and Impacts

While the project was to be measured over the short to mid-term, a long-term objective would be to decrease the number of suicide attempts and even completed suicides by patients served in the clinics. However, in spite of being inordinately tragic for the patients, families, coworkers and clinicians of the patients, suicide is not a common occurrence in a sample as relatively small (in population health terms) as the

primary care population of Naval Medical Center San Diego. Thus, a change in suicide attempts or completed suicides was not seen during the monitoring period of this project, and given that it is a low-base rate behavior, may not ultimately be seen in just the population served at NMCS D. Nevertheless, the architects of this project desire this impact.

While this project did not have a primary economic objective, the identification of potentially suicidal patients and their early treatment may prevent hospital admissions associated with suicide attempts and may reduce completed suicide rates. Both of these reductions would be associated with decreased costs overall. However, the precise dollar figure would be difficult to estimate at present.

Also, improved compliance with Joint Commission standards may not be quantifiable in monetary terms, but this effect is expected. In addition to improving hospital accreditation performance, the project had a positive effect on the image of the organization and in particular as the project was disseminated. This effect cannot necessarily be quantified monetarily either, but is regarded as being of great value since it is good for staff morale, improves the confidence of the patients seen for care at the medical center and the image of the facility as a leader in evidence-based practice. While a dollar estimate for the benefit of the project is difficult to quantify, the project cost the facility only \$5.98 in paper during its development and execution. As noted, the primary author incurred some minor expenses to produce the clinical decision support tools distributed to participants.

This program is expected to continue to have a definitive and continuing impact on the quality and effectiveness of suicide risk assessments by primary care providers. An

improvement in these assessments will lead to more effective identification of patients at risk of suicide, which will translate to earlier and more effective treatment.

Implications for Clinical Practice

In addition to meeting the stated goal, there were a number of outcomes in the institution that suggested a culture shift promoted by this project. In total, sixty-four primary care providers were trained. Sixteen behavioral health providers were also trained through briefer contact. A total of eighty clinical decision support tools were distributed in the facility. Awareness of the issue was raised amongst facility leadership increasing the visibility of the need for improvement in suicide risk assessment. Also, leaders in the Directorate for Mental Health sought out the primary author for assistance with writing the suicide risk assessment and management policy for all inpatient, outpatient and residential treatment settings throughout the medical center.

Sustainability and the Future

In order to ensure that this project would be sustainable over time, the EBP team that deployed it also developed a video of the presentation. Given that the literature suggests that periodic retraining is necessary to maintain the change, this was advisable (While et al., 2012). At the project's conclusion, the Risk Manager was working to ensure that the presentation could be assigned to specific providers through an online training system that would hold those providers accountable for viewing the training.

Given the success of this project, it is recommended that any other department within the facility that is having difficulty with conducting adequate suicide risk assessment and initial management should also undergo the training. These departments may include obstetrics and pediatrics since each of these specialties have primary care

functions for some patients and each of these departments have also demonstrated suboptimal performance vis-à-vis hospital compliance trends.

Concluding Remarks

Inexpensive and brief training interventions can have a positive effect in improving provider performance as it regards suicide risk assessment and initial management. Also, there is evidence that an evidence-based practice project focused on improving suicide risk management can shift institutional culture towards evidence-based practices.

This project reflected a well-researched issue and solution to a clinical problem. The program made allowances for unanticipated events and obstacles. Perhaps the most powerful protection against such events and obstacles is the support that it had received from the Risk Management Department, from the Directorate of Medical Services and the Directorate of Mental Health because it sought to correct an issue of great importance to the hospital. However, this program was ultimately founded upon a moral obligation to provide the highest quality care rooted in the best available evidence to a population that is most deserving.

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Footnotes

¹SAD PERSONS is a mnemonic device used to help clinicians consider commonly accepted risk factors for suicide. These include sex (male), age (15-25 and above 59), depression, previous attempt history, excess ethanol use, rational thinking loss, social support deficit, organized plan, no spouse or significant other and comorbid medical sickness. Each risk factor is worth one point. The points are added and a patient with four or less points is considered to be at 'low risk' of suicide. Patients with five or six points total are considered at 'medium risk' of suicide, while patients with seven or more points are considered at 'high risk.'

Figures

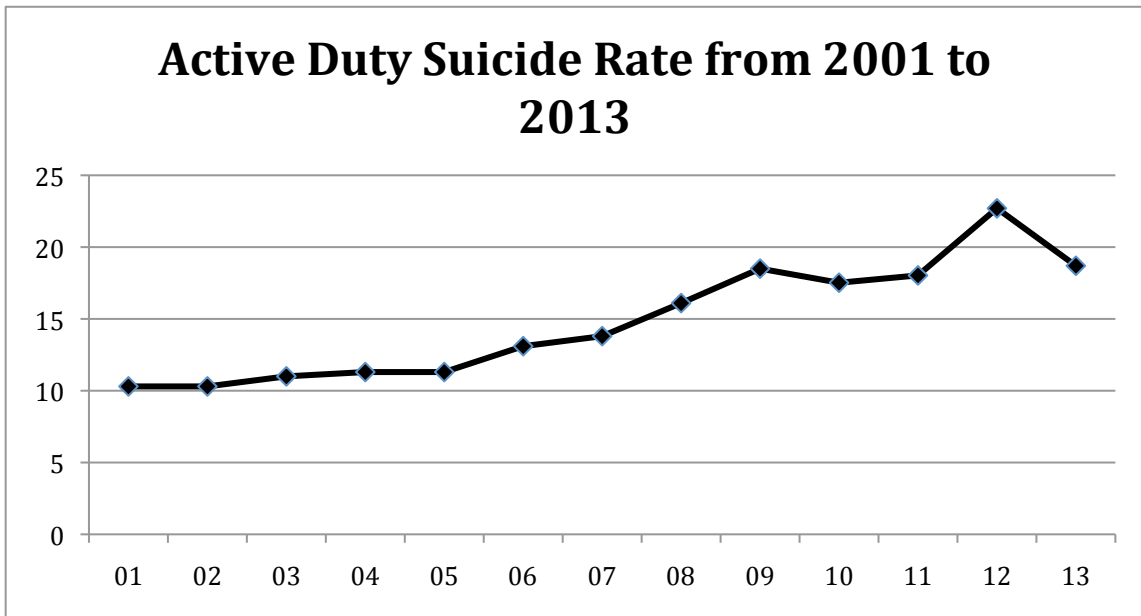


Figure 1. Active Duty Suicide Rate from 2001 to 2013 per 100K. Sources: DoD and RAND.

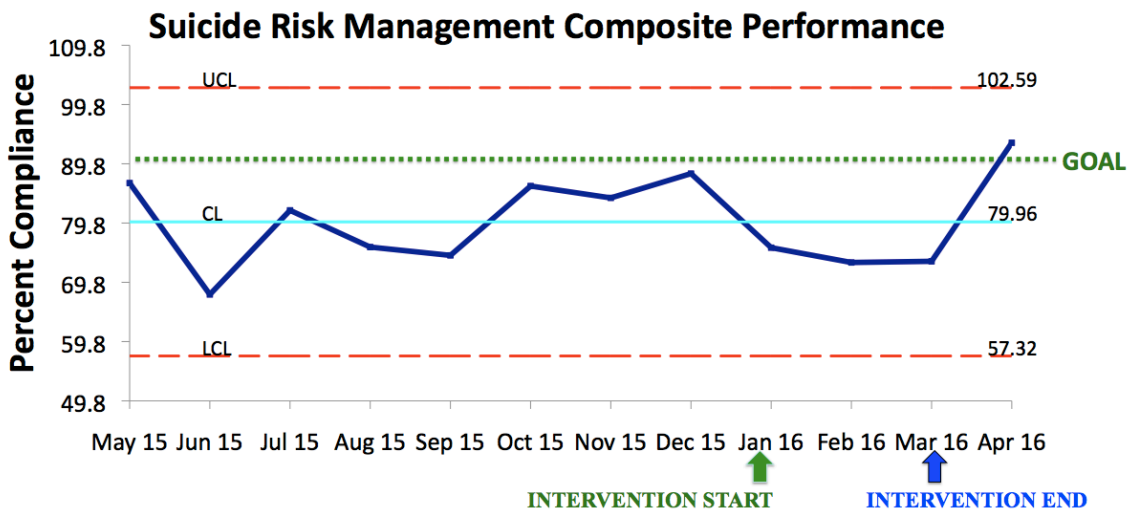


Figure 2. Suicide Risk Assessment Composite Performance in the Directorate of Medical Services.

APPENDIX NOT INCLUDED IN ELECTRONIC COPY