Developing a Patient Care Standard for Adolescents Based on a Nursing Needs Assessment

Kathryn Blake

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DEVELOPING A PATIENT CARE STANDARD FOR ADOLESCENTS BASED
ON A NURSING NEEDS ASSESSMENT

by
Kathryn Blake

A doctoral project in partial fulfillment of the requirements for
the degree of Doctorate of Nursing Practice in the California State University,
Northern Consortium, Doctor of Nursing Practice Program
California State University, Fresno
May 2015
DEVELOPING A PATIENT CARE STANDARD BASED ON A NURSING NEEDS ASSESSMENT

Abstract

Mental health patients often suffer from chronic medical conditions and psychiatric comorbidities requiring frequent emergency, primary care, and acute care visits (Douzenis et al., 2012). Caring for psychiatric patients in acute care hospitals has become an increasing burden on healthcare systems with processes in place to care for acute and critical care patients. Healthcare leaders, providers, emergency departments, and medical/surgical hospitals are straining to provide care for complex patients with acute medical conditions and complex mental health needs (Reiss-Brennan, Briot, Savitz, Cannon, & Staheli, 2010). Caring for children and adolescents with medical and psychiatric problems creates the need for a structured, evidence-based plan as well as systems to provide the safest environment for these children to heal. This project created a Patient Care Standard based on a nursing needs assessment to provide a structured plan of care to utilize available resources and identify opportunities for future quality service line improvements.

The Model for Improvement was utilized to guide this process. The Model for Improvement is utilized and recommended by the Institute for Healthcare Improvement (IHI) for process improvement. This project highlights the ongoing needs of adolescent mental health patients who are receiving care in medical centers all over the country and the struggle for the healthcare team to meet those needs.
This project continues to advocate for the needs of the mental health community as well as the healthcare team who are providing care for them. A Patient Care Standard for pediatric patients receiving care in a non-mental health facility will further define processes and give the healthcare team the tools necessary to advocate for this fragile patient population. Ongoing development of resources and defining the expectations of the mental health practitioners will create a program that comprehensively meets the needs of children, adolescents, healthcare team members, and families.
APPROVED

For the Department of Nursing:

We, the undersigned, certify that the thesis of the following meets the required standards of scholarship, format, and organization set by the university and the student's graduate degree program for the awarding of the master's degree.

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This project could not have been completed without the support and enthusiasm of a group of nurses who want to provide the best possible care to children under our care at all times. Their compassion for the children and the families creates the best possible place for families to heal. My classmates were the best cheering squad for this difficult subject and the importance of the work. My chair Lynn VanHofwegen and faculty has been most supportive in shaping ideas from a defined need to a project that will truly make an impact on patient care.

Finally, I thank my own personal support system, my daughters, who have been my biggest cheerleaders and are patient with my absence to support me in completing this project. My friend Kathy who inspired me and maybe dared me to seek further education has been my sounding board and rock.
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CHAPTER 1: INTRODUCTION

According to the World Health Organization (WHO; 2011), mental illness results in more disability in developed countries than any other group of illnesses, including cancer and heart disease. Other published studies report further statistics: approximately 25% of all U.S. adults have a mental illness and nearly 50% of U.S. adults will develop at least one mental illness during their lifetime (Centers for Disease Control and Prevention [CDC], 2011). Four million children and adolescents in this country suffer from a serious mental disorder that causes significant functional impairments at home, at school, and with peers, and 21% of children ages 9 to 17 have a diagnosable mental or addictive disorder that causes at least minimal impairment (National Alliance of Mental Health, 2014).

Mental health patients often suffer from chronic medical conditions and psychiatric comorbidities requiring frequent emergency, primary care, and acute care visits (Douzenis et al., 2012). Caring for psychiatric patients in acute care hospitals has become an increasing burden on healthcare systems with processes in place to care for acute and critical care patients. Healthcare leaders, providers, emergency departments, and medical/surgical hospitals are straining to provide care for complex patients with acute medical conditions with complex mental health needs (Reiss-Brennan, Briot, Savitz, Cannon, & Staheli, 2010).

Mental illness during adolescence can result in functional impairment, exposure to stigmas and discrimination, an increased risk for premature death, and
increased healthcare costs (LePlatte, Rosenblum, Stanton, Miller, & Muzik, 2012). Many healthcare systems are less prepared to care for adolescents with mental health needs than adults with similar psychiatric needs. The majority of acutely ill children are transferred to children's centers and children's hospitals that can provide quality, comprehensive pediatric care. These children's centers do not have best practice guidelines to guide the care of patients with complex mental health comorbidities. Caring for children with mental health and acute care needs requires complex multidisciplinary care. The setting for this capstone project is a Children's Center that includes a 20-bed pediatric intensive care unit (PICU) and a 47-bed pediatric unit in an urban tertiary care medical center in Northern California.

Caring for children and adolescents with medical and psychiatric problems creates the need for a structured, evidence-based plan as well as systems to provide the safest environment for these children to heal. When a pediatric patient with a psychiatric co-morbidity is admitted to acute or critical care, the primary goal of the pediatric critical care team is to provide medical clearance for these children to receive any needed inpatient or outpatient psychiatric care. The majority of adolescents admitted to this PICU or pediatric unit with a primary or secondary psychiatric diagnosis are admitted for care following a suicide attempt or gesture. Several factors influence nurses' abilities to provide safe, effective care to psychiatric patients in an acute or critical care setting. Nurses' perceptions of
their lack of competence and confidence in managing behavioral symptoms will negatively impact nurses' ability to care for this vulnerable population (Pestka, Hatteberg, Larson, Zwygart, Cox, & Borgen, 2012). Phase I of this project will survey the nursing staff (see Appendix A) to: (a) assess the needs of registered nurses caring for this fragile population in pediatric acute and critical care, (b) assess the perceived confidence and competence of registered nursing in caring for this population, and (c) explore if nurses have the resources necessary to care for adolescents with mental health disorders. Phase II will develop a Patient Care Standard and identify needs for registered nurses to improve their competence and confidence in caring for adolescents with psychiatric or behavioral problems at a children’s medical center in Northern California.

The Model for Improvement will be utilized to guide this process. The Model for Improvement is utilized and recommended by the Institute for Healthcare Improvement (IHI) for process improvement. Associates in Process Improvement developed this model that was adopted by IHI to assist in improvement efforts and projects in health care. This model defines a standard set of core principles, a standard lexicon, and an understanding of the evolution of the science of improvement (Perla, Provost, & Parry, 2013). Utilized both nationally and internationally in healthcare improvement, this model was selected because it is a simple yet powerful tool for accelerating improvement.
The model has two parts. The first part asks three fundamental questions, which can be addressed in any order:

1. What are we trying to accomplish?
2. How will we know that a change is an improvement?
3. What changes can we make that will result in improvement?

The second part of the model is the Plan-Do-Study-Act (PDSA) cycle to test changes in real work settings. The PDSA cycle guides the test of a change to determine if the change is an improvement and can be sustained. This project will utilize the Model for Improvement to guide this process.
CHAPTER 2: REVIEW OF THE LITERATURE

The literature was examined to explore the population of adolescents with mental health co-morbidities, cared for within the PICU, as well as the nurses' competence and confidence in caring for this population of adolescents. A review of the literature was performed using PubMed, PsychInfo, Cochrane databases, and Cinahl using the following search terms: "PICU psychiatric," "adolescent psychiatry," "behavior disorders," "adolescent suicide," "psychiatric co-morbidities," "nurses confidence," "nurse competence." Best practice guideline databases and clearinghouses were also searched. The librarians at the medical center and Fresno State University were utilized for their expertise. The reference lists of identified papers were used to find additional publications. The search was initially restricted to English language papers published between 2008 and 2014. The paucity of research created the need to expand the search to include research from 2000 through 2014.

Adolescent Population

Although the age of an adolescent varies from ages 10 to 19 depending on the literature the World Health Organization, The Joint Commission, California's Children Services, and other regulating bodies consider children age 0-13 years. Adolescents age 14 years and older can be classified as adults in many settings and may be cared for in adult healthcare arenas (Centers for Disease Control and Prevention, 2011). In California, Title 22 guides hospital licensure. California
defines a child as "a person who is 13 years of age and under" (CDSS, 2015). According to the Title 22 regulations, patients beyond the age of 13 shall not be admitted to or cared for in spaces approved for pediatric beds unless approved by the pediatrician in unusual circumstances and the reason documented in the patient's medical record. The adolescents considered in this project will be ages 12–17 to align with the medical center’s partner inpatient psychiatric facility’s definition of the adolescent population (Belfer, 2008; Knopf, Park, & Paul, 2008). For this project, the terms adolescent and teenager will be used interchangeably.

**Suicide Attempt/Gesture**

Suicide is the third leading cause of death in youth ages 15 to 24 (Anderson & Standen, 2007; National Alliance on Mental Health, 2012). More teenagers and young adults die from suicide than from cancer, heart disease, AIDS, birth defects, stroke, pneumonia, influenza, and chronic lung disease combined. Over 90% of children and adolescents who commit suicide have a mental disorder. In 2002, nearly 4,300 young people ages 10 to 24 died by suicide in the US. States in total spend nearly $1 billion annually on medical costs associated with completed suicides and suicide attempts by youth up to 20 years of age (National Institute of Mental Health, 2014).

A suicide gesture is a self-injuring behavior not to die but to communicate with others (Nock & Kessler, 2006). Adolescents who attempt suicide or make a suicidal gesture make up an overwhelming majority of the adolescent patients with
psychiatric comorbidities receiving care from the urban Children's Center. The Children's Center site for this project does not provide care for trauma victims, the exception being closed-head injuries. The healthcare team is comprised of nurses, physicians, social workers and others who provide care for adolescents who have made a suicide attempt or gesture by overdose. McManama O'Brien and Berzin (2012) report the majority of the adolescent patients in their study attempted suicide by ingestion (87%). In this children’s center, the population of adolescents who have harmed themselves is similar to that reported by McManama O'Brien and Berzin. The drug most frequently ingested as either a suicide attempt or gesture is acetaminophen.

**Behavioral Disorders**

Adolescents with behavioral disorders are the minority of adolescents with psychiatric disorders within this PICU, but are the patients who provide the greatest stress on the healthcare team. Nurses have self-reported their lack of confidence in managing adolescent patients with impulse control issues and manipulative behaviors and those who may become violent.

Autism spectrum disorders (ASD) refers to a group of developmental disorders distinguished by variable presentation of difficulties with socialization, communication, and behavior, which are estimated to affect at least 7 in 1,000 children and adolescents in the general population (CDC, 2011). Much higher rates of ASD ranging from 2 to 14% have been reported in youth referred for
psychiatric care, thereby comprising a substantial subgroup of patients referred for psychiatric treatment (Joshi et al., 2010). This project is focused on adolescents with psychiatric disorders, not ASD. Adolescents with autism and a medical co-morbidity differ from the frequently managed suicidal or depressed patient; managing their difficult behaviors requires the expertise of the multidisciplinary psychiatric team.

**Depression**

In 2012, an estimated 2.2 million adolescents in the U.S., aged 12 to 17, had at least one major depressive episode in the past year (NIMH, 2012). This represented 9.1% of this U.S. age group. There is a lifetime prevalence of 20% by the time the adolescent transitions to adulthood. In addition, depression is associated with other serious mental disorders, higher rates of substance abuse, and an increased risk of suicide (Bennett, 2012; Nock & Kessler, 2006).

Children and adolescents who experience prolonged hospitalization are at risk for developing depression. This Children's Center has a very busy pediatric hematology/oncology program. Some adolescent patients with complex oncological diagnoses require planned and unplanned long-term hospitalizations. Studies have revealed that, on average, children and adolescents with chronic physical illnesses had higher levels of depressive symptoms than their healthy peers (Davies & Huws-Thomas, 2007; Pinquart & Shen, 2011).
**Competence and Confidence**

The International Council of Nurses defines competence as a level of performance resulting from the application of appropriate knowledge and skills, as well as the use of professional judgment. As independent healthcare professionals, nurses are expected to demonstrate an appropriate level of competence in the particular setting where they work (Skirton, O’Connor, & Humphreys, 2012). The education to demonstrate competency primarily focuses on the area of specialty, but mental health patients receive care in every area of acute care hospitals. Nurses receive a minimal amount of education in the care of mental health patients in their nursing program and this education may or may not include adolescent or pediatric focused mental health care. Nurses will receive additional mental health education if they specialize in the field of mental health nursing.

Mental health difficulties are linked to episodes of self-harm and healthcare professionals need to be updated regularly on current trends in caring for patients with psychiatric needs (Anderson & Standen, 2007). The number of incidents of nurses exposed to violence continues to increase, not only in psychiatric-mental health care facilities, but also in emergency rooms, long-term care facilities, and acute care hospitals (Bernstein & Saladino, 2007). Generally speaking, registered nurses who care for young people with mental health conditions in general pediatric wards do not feel educationally prepared (Buckley, 2010).
Nurses working in Pediatrics and PICU are expected to demonstrate competency caring for children with a wide variety of diagnoses and co-morbidities. The diagnoses range from complex cardiovascular surgery, pneumonia, septic shock, cancer and multisystem illnesses. Educational programs are in place to improve the nurses' knowledge in caring for critically ill children with cardiovascular disorders, neurologic disorders, endocrine disorders, hematology/oncology disease, respiratory failure, and other conditions that would prompt admission to critical or acute pediatric care. At this medical center and Children's Center electronic learning (elearning) is utilized to validate annual competencies and provide new educational material. The topics for mental health include restraint usage, recognizing potential violence, and managing aggressive behavior. These modules focus on employee safety, situational awareness, and an assessment for potential escalating behaviors. There is no formal program offered to increase nursing knowledge of children or adolescents with mental health disorders.

Multiple factors influence nurses' ability to provide effective care to patients with mental health disorders in non-psychiatric settings. Of primary concern is that the nurses perceive their own lack of competence and confidence in managing behavioral symptoms (Pestka et al., 2012). Nurses’ limited clinical experience engenders their lack of self-confidence, which can adversely affect patient care and cause dangerous, otherwise preventable situations to arise.
(Cockerham, Figueroa-Altmann, Eyster, Ross, & Salamy, 2011). A systematic review reveals that nurses play a pivotal role in improving the inpatient care of this vulnerable population, but they struggle in their attempts to do so. Zolnierik (2009) identifies that research is needed to determine the best approaches to promote nurses’ knowledge, positive attitudes and self-confidence in caring for patients with psychiatric comorbidity is needed. In another study, a nurse’s experience in caring for mental health patients in a critical area was characterized by categories of tension, discomfort, lack of professional satisfaction, and difficulty (Zolnierek & Clingerman, 2012). Ewalds-Kvist, Algotsson, Bergström, and Lützén (2012) report that the more intensive care a psychiatric patient’s needs the more specialized competence is required.

**Patient Care Standard**

Evidence-based research provides the basis for sound clinical practice guidelines and recommendations (Agency for Healthcare Research and Quality [AHRQ], 2015). The AHRQ clearinghouse guidelines were searched for evidence-based guidelines for this patient population, and mental health disease-specific guidelines were identified. Many clinical practice guidelines were reviewed such as guidelines for suicide risk, disease recognition, outpatient treatment, emergency department treatment, and inpatient psychiatric care. The Children's Hospital Association (CHA, 2015) identified the hospital-based inpatient psychiatric service (HBIPS) series as one of the five Children's Hospital
quality measures for 2015, still referring to inpatient psychiatric care. These best practice guidelines continue to guide inpatient psychiatric care, primary care, and outpatient treatment, but not care of mental health patients in acute care hospitals.

In this Children's Center, the Patient Care Standard (PCS) are the guidelines utilized to direct patient care. These guidelines are approved by nursing and physician executive committees to direct quality and safe patient outcomes. The patient care standard for the Psychiatric Response Team (PRT) was reviewed utilizing the *American Psychological Association’s Criteria for Practice Guideline Development and Evaluation* (American Psychological Association [APA], 2014).

The purpose of the policy is clearly identified: "to provide the expertise for the planning and care for patients with mental health issues" (Coffin & Wicks, 2011, p. 1). The patient care standard for the PRT does not list references, define terms, nor discuss APA guidelines.

The Psych Response Team’s Patient Care Standard identifies the roles of the PRT as follows: Director of Affiliated Programs and Services, Liaison Psychiatrist, Nursing Supervisor, Psychiatric RN, Licensed Clinical Social Worker, and Patient Care Support Specialist (PCSS). This team was created to promote a safe environment for the patients and staff, and to evaluate patients with a psychiatric component to their illness for the purpose of finding inpatient psychiatric care placement when appropriate. However, these guidelines do not address services for children or adolescents under the age of 14. This PCS also
does not meet the complex needs of adolescents or the staff caring for the adolescent population. Current practice and resources do not meet the standards identified in the medical center's Patient Care Standard for the care of patients 14 years and older. When treating adolescents, the PRT is supposed to assist with inpatient psychiatric placement only after medical clearance has been achieved. Despite this standard, in this medical center's current model, all acute inpatient and outpatient departments and the emergency department share limited psychiatric resources causing a gap for all patients.

**Review of Findings**

Adolescents are not receiving the inpatient and outpatient evidence-based mental health services they need (Lusk & Melnyk, 2013). There is a lack of vigorous research and evidence-based guidelines to guide practice for adolescents with mental health disorders receiving care in Pediatrics and PICU. An abundance of evidence exists surrounding the care of patients with mental health problems; however, this evidence is focused around the care and experience of caring for psychiatric patients in the emergency department and in psychiatric inpatient facilities. This lack of evidence and best practices surrounding patients with mental health disorders receiving care in non-psychiatric settings has created an environment where multidisciplinary team members lack confidence and competence to care for children and their families with mental health disorders who are experiencing a crisis.
Locally in comparable institutions, these adolescents are cared for by a variety of healthcare professionals. At the local university hospital, a pediatric psychiatry residency program supports the adolescents and healthcare professionals. These residents provide counseling and medication management in coordination with the other acute care and critical team members. Other community health centers do not have programs to manage these complex patients; therefore, the teenagers are transferred to the university hospital or other facilities for care.

In this Children's Center identified for this project, guidelines exist for the 14 and over population as previously discussed. However, these guidelines are not applied to the adolescent population in the pediatric inpatient population. In addition, there are no PCS or mental health services evident for adolescents under age 14. This gap can cause an unsafe environment for the patients and staff.
CHAPTER 3: METHODOLOGY

Project Design

This study was designed to measure and evaluate the nurses' confidence and competence in caring for adolescents with mental health concerns in the acute and critical care setting. In addition, the data will be utilized to create opportunities to improve the nurses' experiences and create a Patient Care Standard. Mixed methodology was utilized to view problems from multiple perspectives. Quantitative data were combined with open-ended qualitative questions with an opportunity for participants to write comments.

The Patient Care Standard process is guided by the fundamentals of the Model for Improvement as identified by the Institute for Healthcare Improvement. This process was used to guide the development of the PCS.

- **Forming the team** – Effective teams include members representing three different kinds of expertise within the organization: system leadership, technical expertise, and day-to-day leadership. This step in the process was captured early in this project as the need for an improvement in the care of these adolescent was identified. The initial team was comprised of the DNP Student, Psychiatric Nurse Educator, Psychiatric Nurse Practitioner, and the Director of the Psychiatric Service Line.

- **Setting aims** – The aim should be time-specific and measurable; it should also define the specific population of patients that will be affected. The
early aims included education of the nursing staff members who were caring for adolescents with mental health needs.

- **Establishing measures** – Measurement is a critical part of testing and implementing changes; measures tell a team whether the changes they are making actually lead to improvement. Questions in the needs assessment were included to further develop goals of this project. A report by nurses of increased confidence and competence and increased availability of resources would indicate effective change.

- **Selecting change** – Specific changes are developed from a limited number of change concepts. The feedback from the needs assessment was utilized to select change needed that is specific to the needs of the nursing staff.

- **Testing changes** – Using the Plan-Do-Study-Act (PDSA) cycle for testing a change. The nursing needs assessment was performed and the PCS was reviewed. PDSA will continue to guide future tests of change for this group of nurses caring for adolescents.

- **Implementing changes** – A permanent change to the way work is done and, as such, involves integrating the change into the organization. This step in the process is ongoing.

- **Spreading change** – Taking a successful implementation process from a pilot unit or pilot population and replicating that change or package of changes in other parts of the organization or other organizations. The
improvement in overall resource availability and improvement in
psychologist/psychiatrist engagement would demonstrate and improvement
in service throughout this medical center.

Setting

This study was conducted at one Children's Center within an acute care
table in an urban area in Northern California. The medical center has 823 beds
including inpatient psychiatric hospital and long-term care facility. An adult or
adolescent with a primary or secondary mental health disorder can occupy any of
these beds with a variety of medical and mental health needs. In the Children's
Center, the pediatric inpatient floor has 46 beds and the PICU has 20 beds. The
intensity of the nursing needs and need for cardiac monitoring and direct
observation determine patient placement to pediatrics or PICU.

Survey Tool

A 13-question survey was designed to examine the nurses’ experiences in
caring for adolescents with mental health needs in a non-psychiatric setting. The
survey contained eight questions with an additional five demographic questions.
Subject matter experts validated the instrument. These experts included the
Nursing Director, PRT member, and PICU Registered Nurse. Reliability was not
assessed. The dependent variables included nursing needs, competence,
confidence, and awareness of available resources. The independent variable is the
individual nurses' perceptions of their ability to meet the demands of these fragile
patients. Each question was scored using a Likert-type scale (for example, in rating competence: no competence–very competent). Open-ended questions as well as an opportunity for additional comments were included to collect qualitative data. Open-ended questions and areas for comments were designed to capture the nurses' experiences as well as identify additional opportunities to improve the nurses' competence, confidence, and possible program gaps.

**Population and Sample**

All registered nurses who provide direct patient care in the Children's Center were distributed an electronic survey. Registered nurses in pediatrics (n=68) and PICU (n=44) received the same survey. These nurses are competent to float to either area to care for pediatric patients. Demographic information was also gathered from respondents.

**Data Collection**

An introductory email was sent to the registered nurses (N= 112) a week before the survey was available (see Appendix B). The survey was distributed electronically with a link to the survey website Survey Monkey and was available for two weeks. A reminder was sent via email mid-survey. The data was collected via the Survey Monkey website.

**Data Analysis Plan**

Univariate and descriptive statistics were collected. There were no missing values. Comments (qualitative descriptive data) were categorized to identify
themes to further develop educational plan and opportunities for quality
improvement. The PCS was reviewed utilizing the American Psychological
Association Criteria for Practice Guideline Development and Evaluation.

**Ethical Consideration**

Full approval was received from the Institutional Review Board (IRB) at
California State University, Fresno and the Institutional Review Committee (IRC)
at the medical center. Informed consent was obtained from participants at the
introduction to the survey. The nurses were informed that their participation in the
survey was consent to participate. Participants were notified that their
participation was voluntary and that the risks were minimal. They were informed
that the survey was designed to be completely anonymous for respondents, and
that the data would be secured and remain confidential. In addition, the
participants were thanked and given contact information for the researcher, the
IRB, and the IRC.

**Bias**

This project was initiated after a gap in service was identified. This
researcher has been a member of this team for 20 years and helped identify service
line gaps. The survey was created to articulate the needs of the nursing staff to
improve their care of this patient population.
CHAPTER 4: RESULTS AND DISCUSSION

Data were collected over a four-week period and analyzed through web-based Survey Monkey. Forty-nine registered nurses participated, which is a 44% participation rate. The participants were primarily female (47), but two were male. The nurse ages were collected in ranges to further protect anonymity. The 20-35 year category comprised 24.49% of participants, 46.94% fell in the 36-50 year category, and 28.57% were over 50 years ($SD = 0.73$). Just under half of nurses who participated in the study (37.78%) had an associate’s degree in nursing, 51.02% had a bachelor’s degree, and 10.2% were masters prepared ($SD = 1.1$; see Figure 1).

Figure 1. Registered nurse education.

Respondents had a variety of nursing experience, with a strong preference toward pediatric nursing (see Figure 2). Less than one quarter (16.32%) had five
years or less nursing experience, 28.57% reported 6-10 years in nursing, 20.41% had 11-15 years, 8.16% had 16-20 years, and 26.53% of nurses had more than 20 years’ experience. Finally, 14.29% had less than five years’ experience in pediatric nursing, 32.65% had 5-10 years of experience, and an impressive 53.06% had more than 10 years’ experience caring for children. This demographic data represent a group of nurses with rich experience in pediatric nursing.

![Figure 2. Registered nurse experience.](image)

Nurses reported caring for a mean of 1.3 adolescents with a primary mental health disorder per month. Referral data estimate this facility admits four patients with primary mental health needs per month. Data are not collected in this hospital setting to demonstrate the number of adolescents with psychiatric co-
morbidities. One hindrance to meaningful data collection is the physician's diagnosis selection. For example, an adolescent who makes a suicide attempt or gesture by ingesting acetaminophen may have a primary diagnosis of “ingestion,” “poisoning,” “suicide attempt,” “depression,” or “overdose.” The practice of diagnosis varies depending on medical training, as reported by one Pediatric Intensivist.

Nurses' reports of confidence and competence are very similar to each other. Competence and confidence were not defined for the purpose of this survey. Four and eight hundredths percent of the participants reported no confidence and competence. Almost one third (30.61%) reported little confidence and 28.57% reported little competence. Nurses at 61.22% reported moderate confidence and 63.27% reported moderate competence. Four and eight hundredths percent of the staff felt very competent and confident. There is no relationship between level of confidence and competence and years of experience in nursing or pediatrics. One nurse reported moderate competence and confidence with 0-5 years of pediatric experience while another nurse with 16-20 years experience reported little confidence and competence.
Table 1

Registered Nurses’ Confidence and Competence

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Nurses reported inadequate resources to care for this patient population. Twenty-seven (55.10%) reported they did not have adequate resources. Twelve (24.49%) nurses reported adequate resources, while 20.41% are unsure if the resources are adequate. The nurses rely heavily on social workers (87.76%), childlife specialists (69.39%), and physicians (69.39%) as their resources. Only 38.78% reported utilizing the PRT as a resource for adolescents with mental health needs (see Figure 3).
Qualitative data were collected to identify the needs of the nurses. Resources, education, and a need for a clear plan of care were the primary themes identified. The question asked was, “What do you need to provide safe, effective care for these patients?” A psychiatric evaluation was identified seven times, a clear plan of care was identified five times, and education was identified 14 times. Under the theme of education, nurses specifically identified “knowledge,” “teaching,” “in-service,” and “training” as key words. These results were similar to the Buckley (2010) study. The nurses were asked for any additional comments. Eighteen participants provided additional comments and feedback. These comments were similar to the responses regarding resources. The nurses restated the need for resources in the additional comments. In addition, the nurses
expressed concern over the community’s lack of outpatient services for follow-up and additional inpatient psychiatric facility beds.

**Limitations**

This survey was a needs assessment. As such, the findings give a snapshot of the reported needs of the participants. As this survey was performed in one hospital, the findings cannot be extrapolated to other settings. The opinions and needs in other hospitals may differ from the reported needs of the nurses in this setting. The findings serve to inform needs and strategies for this group of nurses in this hospital and were helpful in the development of beginning strategies to support nurses and other healthcare team members in their care of adolescents in this unique hospital setting.

**Patient Care Standard**

The literature review did not identify best practices utilized at other Children's Hospitals or Centers to guide adolescent mental health care for adolescents receiving care in acute care hospitals. Search for best practices were explored at several Children's Hospitals and Centers in Northern California without result that further demonstrates a need for best practice guidelines. A similar exploration was sent to the Children's Hospital Association (CHA) and was dispersed to CHA members without meaningful response. This may demonstrate a lack of best practice guidelines.
This acute care hospital and the Children's Center utilize a standardized format for Patient Care Standards in the adult and pediatric areas. Utilizing the American Psychiatric Association criteria for practice guidelines and a template utilized to create PCS at the Children's Center, a Patient Care Standard was developed (see Appendix C). This PCS will be utilized to guide practice and identify age-specific resources for children and adolescents with primary or secondary mental health needs.

The APA Criteria for Practice Guideline Development was utilized to guide the development and evaluation of the PCS. The term guidelines refers to statements that suggest or recommend specific professional behavior, endeavor, or conduct for team members. Guidelines differ from standards in that standards are mandatory and may be accompanied by an enforcement mechanism. Thus, guidelines are aspirational in intent (APA, 2015). This new PCS meets several of the APA criteria. The defined purpose, developer, and users are identified clearly. APA does not have a policy that directs the care of adolescents who need mental health care within an acute care hospital. Thus, the criteria to meet the APA guidelines are not applicable. This PCS meets the feasibility requirement, with clear language and rationale for the PCS. PCSs have an enforcement mechanism in this Children's Center.
CHAPTER 5: RECOMMENDATIONS AND CONCLUSION

This project was designed to assess the needs of the nurses caring for adolescents with mental health needs in one Children's Center in Northern California and to develop a Patient Care Standard to meet the complex needs of the patient and team providing care. Phase one of this project assessed the needs of the nursing staff. Phase two developed a new Patient Care Standard and analyzed the nurses' needs to further improve confidence and competence. The findings demonstrate the nurses report they have some competence and confidence but they have identified that they have additional needs to feel fully confident and competent.

The developed new Patient Care Standard is a clinical tool based on the best available evidence in conjunction with the standards of the medical center. The process from identifying the need for change through a change in nursing practice was and continues to be a complex one involving many stakeholders. Initially, a team was developed of members from the adult psychiatric service line and this researcher analyzed services offered to meet the needs of adolescents with mental health needs at this Children's Center. Through the discussion of needs and gaps, a four-hour workshop was presented to educate healthcare team members in the care of adolescents with mental health needs and identify service gaps for these complex patients. From needs identified during this workshop, the nursing needs assessment was developed. Concurrently, Pediatric Intensive Care
Physicians were mentored by the Psychiatric Nurse Practitioners in psychotropic medication management for adolescents in the Children's Center.

Based on the results of the nursing needs assessment and the gaps identified in this work group, a Patient Care Standard (PCS) was developed. This new PCS can be utilized to create a new PCS format that incorporates the needs of the patient and the standard work of the registered nurse that aligns with the changes in the nursing model for this Children's Center within the medical center. This new tool can improve clinical effectiveness and efficiency and ensure that each available resource is utilized to meet the needs of the patient, family, and team of healthcare professionals. In addition, this project can inform nursing practice in terms of nurses continuing to search for guidelines to care for patients with mental health needs in all areas of acute care hospitals.

**PDSA and the Model for Improvement**

A permanent change in the care of adolescents with mental health needs utilizing the PCS will be evaluated through ongoing assessment in alignment with the organization's use of standard work. After education on the use of the new PCS, the Registered Nurses will be assessed by their direct supervisor and receive immediate feedback on the utilization of the PCS to guide practice. These steps of assessment and feedback build change into the nursing practice and create a consistent voice in advocating for the needs of the patient, nurse, and other team
members. In addition, the PCS creates a set of expectations and agreements between all team members.

The spread is the process of taking a successful implementation process from a pilot unit or pilot population and replicating that change or package of changes in other parts of the organization or other organizations. This PCS with the standard work for the Pediatric Registered Nurses can be duplicated in the adult areas of the medical center to utilize the PCS as an active set of guidelines the nurses will consistently utilize to ensure that all patients receive evidence-based care.

**Improved Data Collection**

Healthcare data are imperative to quality improvement. In quality improvement, managing data is an essential part of performance improvement. It involves collecting, tracking, analyzing, interpreting, and acting on an organization’s data for specific measures, such as clinical quality measures (Department of Health and Human Services, 2012). The lack of data available for this patient population creates a barrier to identifying and allocating quality measures to proactively improve patient outcomes. Adoption of an electronic healthcare record in August 2015 may improve data collection.

**Mental Health Resources**

Data also drive the allocation of healthcare resources. The nurses have identified that the resources for children and adolescents who have mental health
needs are inadequate. Their identified needs specifically target education and consultation by mental health practitioners. Educational resources need to be further identified and allocated in the next budget cycle. Physician contracts need to be reviewed to examine opportunities for acute inpatient consultation for children’s and adolescent mental health services.

Conclusion

This project highlights the ongoing needs of adolescent mental health patients who are receiving care in medical centers all over the country and the struggle for the healthcare team to meet those needs. This project continues to advocate for the needs of the mental health community as well as for the healthcare team who are providing care for them. A Patient Care Standard for pediatric patients receiving care in a non-mental health facility will further define processes and give the healthcare team the tools necessary to advocate for this fragile patient population. Continually developing resources and defining the expectations of the mental health practitioners will create a program that comprehensively meets the needs of children, adolescents, healthcare team members, and families.
REFERENCES


APPENDIX A: SURVEY

Pediatric Nursing Needs Assessment

Survey Introduction and Consent

Thank you for participating in this survey to improve the care of adolescents with psychiatric co-morbidities. This survey is being conducted by CSU, Fresno Doctor of Nursing Practice (DNP) Student Kathy Blake, RN, MSN for the purpose of exploring your experience in caring for adolescents with mental health and behavioral health diagnoses in Pediatrics and PICU. The patient population this survey focuses on is adolescents with diagnoses such as suicide attempt, behavioral disorders, depression, including depression caused by chronic illness and others.

This survey is designed to be completely anonymously — your answers cannot be linked to you in any way. Please do not put any identifying information in any “comments” or narrative portions of the survey. You are encouraged to add information where indicated, but please use general terms.

Completion of the survey will take approximately 10 minutes of your time. The risk identified is the possibility of breaching of the data. Security is in place to minimize this risk. The benefits of participation include participation in process improvements and enhancing your nursing care of adolescents with mental health disorders. Please answer the survey questions honestly. There are no risks associated with this study. If you do experience difficulty with any questions, you are free not to answer the question(s) or to withdraw from the study by not submitting your survey.

If you choose to take part in this study, please continue on to the survey questions and submit the survey by selecting the “send survey” button when you are done.

Your participation is completely voluntary and you can stop participation at any time. Completion of all or part of this survey and submitting the survey indicates your agreement to participate.

You may print out this page for your records. If you have any questions about this study, please feel free to contact Kathy Blake via email at blakekr@sutterhealth.org

If you have any questions about your rights as a research participant, you may call Sutter Health Central Area Institutional Review Committee (IRC) at (916) 733-3864, or write to 2800 L Street, Sacramento, CA 95816 or Fresno State Office of Research and Sponsored Programs at (559) 278-0840, or write to 4910 N Chestnut Ave Fresno, CA 93728.

Thank you for your time and thought in completing this survey.
Pediatric Nursing Needs Assessment

1. On average, how many patients with psychiatric disorders do you care for per month?
   - 0-1
   - 2-4
   - 5-8
   - More than 8

2. What do you need to provide safe, effective care for these patients?

3. Rate your confidence in caring for adolescents with mental health disorders.
   - No confidence
   - Little confidence
   - Moderately confident
   - Very confident

4. Rate your competence in caring for these patients.
   - No competence
   - Little competence
   - Moderately competence
   - Very competent

5. From your perspective, do you have adequate resources to care for this patient population? Resources such as experts, orders, social workers, etc.?
   - Yes
   - No
   - Not sure

6. Please select resources that you frequently utilize. Select all that apply.
   - Social Work
   - Physician
   - Psych Response Team
   - Nursing Supervisor
   - Manager
   - Childlife Specialist

7. How supported do you feel by physicians and other team members (social work, child life, managers, etc.) when caring for adolescents with mental health problems?
   - Very supported
   - Somewhat supported
   - Rarely supported

8. Your feedback is very important to improve the care these patients receive. Do you have additional comments/experiences to share?

9. How many years have you been practicing nursing?
   - 0-2 years
   - 3-5 years
   - 6-10 years
   - 11-15 years
   - 16-20 years
   - Over 20 years

10. What is your gender?
    - Female
    - Male
Pediatric Nursing Needs Assessment

11. What is your age?
   - 20 to 35
   - 36 to 50
   - Over 50

12. What is your nursing degree?
   - Associates degree
   - Diploma
   - Bachelor's degree
   - Master's degree

13. How many years have you worked in pediatrics?
   - less than 5 years
   - 5-10 years
   - more than 10 years
Peds/PICU RNs,

We are consistently admitting a steady number of adolescents with psychiatric disorders and co-morbidities. The adolescents that are included in this population that we are consistently seeing are adolescents who have attempted suicide, adolescents with behavior disorders and adolescents with depression due to prolonged hospitalization (consider the heme/onc population).

My doctoral project is focused on this service line. Next week I will be sending you an email with a link to an online survey on Survey Monkey to explore your needs to competently and confidently care for these teens. Below is a link to an online survey on Survey Monkey to explore your needs to competently and confidently care for these teens.

Survey Monkey does not record any of your identifiable information. The survey will be very easy to complete and the survey will be anonymous. Your responses will be utilized to make improvements in their care, support you in your learning and other improvements based on your suggestions. This survey is voluntary, but I would truly appreciate your participation.

Please email me or stop me in the hall if you would like further information or want to discuss this project or our care of adolescents with mental health needs. I appreciate your input and look forward to reading the results of the survey.

Sincerely,

Kathy Blake, RN, MSN, CCRN
# APPENDIX C: PATIENT CARE STANDARD

## TITLE: PEDIATRICS: Admission and Care of Pediatric Patient with Mental Health Needs

<table>
<thead>
<tr>
<th>POLICY STATEMENT:</th>
<th>Caring for children and adolescents with medical and psychiatric problems creates the need for a structured, evidence-based plan and systems to provide the safest environment for these children to heal.</th>
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<tbody>
<tr>
<td>WHO MAY PERFORM:</td>
<td>Pediatric Registered Nurses</td>
</tr>
<tr>
<td>SUPPORTIVE DATA:</td>
<td>When a pediatric patient with a psychiatric comorbidity is admitted to acute or critical care, the primary goal of the pediatric critical care team is to provide medical clearance for these children to receive needed inpatient or outpatient psychiatric care. The majority of adolescents admitted to the PICU or pediatrics with a primary or secondary psychiatric diagnosis are admitted for care following a suicide attempt or gesture. Pediatric patients may experience mental health disorders while under treatment for another medical health need. This patient care standard applies to any pediatric patient with a primary or secondary mental health need.</td>
</tr>
</tbody>
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### INITIAL ASSESSMENT:
- Pediatric Nursing Assessment
- Medication Reconciliation
- SAD Persons Suicide Risk Screening

### ONGOING CARE:
- Pediatric Nursing Assessment and Medical Assessment will be performed daily to assess medical clearance for discharge or inpatient psychiatric services.

### REFERRALS:
- Childlife Specialist
- Social Work
- Psych Response Team

### PROCEDURE/STANDARD WORK
1. RN introduces self and role (RN name on care board)
2. RN establishes eye contact with patient or family member. RN acknowledges patient and family member by preferred name as indicated on patient care board.
3. RN Performs and documents nursing assessment
4. RN assesses patient’s pain level using age
### TITLE: PEDIATRICS: Admission and Care of Pediatric Patient with Mental Health Needs

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<table>
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<tr>
<td>4.</td>
<td>RN performs medication reconciliation.</td>
</tr>
<tr>
<td>5.</td>
<td>RN performs medication reconciliation.</td>
</tr>
<tr>
<td>6.</td>
<td>RN asks the patient about tools/distraction utilized to promote a calm environment. RN contacts Child Life for assistance.</td>
</tr>
<tr>
<td>7.</td>
<td>RN performs SAD suicide risk screening and completes appropriate documentation and supervision.</td>
</tr>
<tr>
<td>8.</td>
<td>RN ensures the patient’s call light is within reach of patient. RN asks the patient and family if any other items are needed. RN ensures the room is safe.</td>
</tr>
<tr>
<td>9.</td>
<td>RN notifies Psych Response Team.</td>
</tr>
<tr>
<td>10.</td>
<td>RN collaborates with MD and social worker to determine additional referrals needed.</td>
</tr>
<tr>
<td>11.</td>
<td>RN discusses plan of care with patient, family, physician and additional team members and documents on patient care board on admission, with daily rounds and change of shift.</td>
</tr>
<tr>
<td>12.</td>
<td>At the end of each shift RN reviews the patient goals with patient and family - along with what is important to the patient from the patient care board. RN Updates goals on care board as needed.</td>
</tr>
</tbody>
</table>

| **NOTIFY PHYSICIAN/ PEDIATRIC INTENSIVIST OR HOSPITALIST** | Changes in assessment. |
| **PATIENT/ FAMILY EDUCATION:** | Patient /Family will receive education upon admission and participate in plan of care development. Goals and questions for team will be documented on care board. |
| **DOCUMENTATION:** | Pediatric Nursing Flowsheet Medication reconciliation SAD Persons Suicide Risk Screening Tool |
| **REFERENCES:** | American Psychology Association Practice Guidelines (2014) |
| **CROSS REFERENCES:** | Lippencott |
| TITLE: PEDIATRICS: Admission and Care of Pediatric Patient with Mental Health Needs |
|---|---|
| Origination Date: April 2015 | Written by: Kathryn Blake, DNP(c), MSN, RN, CCRN |
| Approval Date: | Approved by: Chief Nurse Executive |