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Improving Pediatric Medical Nurses' Confidence in Caring for Pediatric Mental Health Patients: A Pilot Project Large Academic Pediatric Health System in the Pacific Northwest

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Improving Pediatric Medical Nurses' Confidence in Caring for Pediatric Mental Health Patients: A Pilot Project Large Academic Pediatric Health System in the Pacific Northwest

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Executive Summary

Problem Description

Pediatric mental and behavioral health care needs continue to increase across the nation. Approximately ten percent of pediatric hospitalizations are for a primary mental or behavioral health condition (Canvara & Johnson, 2020). With the increase in hospitalizations for mental health (MH) needs, pediatric psychiatric units are at capacity, and MH patients are admitted to pediatric general medical/surgical units for care. Most of the nurses that work on these units have not received pediatric mental health education outside of nursing school curricula and report a lack of confidence in their ability to care for pediatric MH patients. With the pediatric MH population growing, meeting the needs of these patients with nursing care is essential.

Setting

This DNP project was conducted at a large pediatric health system in the Pacific Northwest with over 2,000 nurses. This project was implemented on a 32-bed pediatric medical unit that employs approximately 82 nurses. Children experiencing primary mental health diagnoses in this unit include major depressive episodes, autism spectrum disorder, suicidal ideation, and eating disorders.

Rationale

Evidence suggests that one way to improve the MH care patients receive is through education. Kolb's Experiential Learning Theory (ELT) provided a theoretical framework to develop a course that incorporated didactic content with a concrete learning experience. Standardized Patient (SP) simulation was used and is a modality that aligns with Kolb's ELT. It allows a nurse to practice concepts in a realistic scenario while getting feedback directly from a patient (actor) on how the nurse's actions impacted the patient and their behavior. Mental Health SP simulations improve both knowledge and self-efficacy in nurses significantly.

Project Aims

This DNP project sought to identify and implement an educational program that included SP simulation to improve nurses' confidence in caring for pediatric MH patients in a pediatric inpatient medical unit.

Project Outcomes

Five short-term outcomes (STOs) measured the success of this DNP pilot project. Project outcomes included course participation goals, nurse confidence (self-efficacy) improvement, nurse knowledge improvement, decreased behavioral resource support requests, and improved epic care plan documentation data.

Implementation and Evaluation Plan

Project implementation consisted of facilitator/Standardized Patient (SP) training with six planned classes over eight weeks. Nurses self-enrolled in the course and completed a pre-knowledge and pre-self-efficacy assessment. During the scheduled course time, nurses went through a curriculum that consisted of one and a half hours of trauma-informed care and crisis management content followed by two hours of standardized patient simulation. Post-knowledge assessments and self-efficacy assessments were completed within two weeks post-course.

Results

Twenty-two percent (n=20) of eligible pediatric medical nurses participated in the pilot study. Overall, nursing self-reported confidence increased by 25%, and nursing knowledge increased by 4% post-education and SP simulation. Additionally, calls for direct nurse knowledge and coaching support to the behavioral response team decreased by 8%. Unfortunately, due to contextual factors, nursing care plan documentation was not assessed.

However, one unexpected outcome was an improvement in patient belonging and safety screening by 13%.

Interpretation

The findings in this study align with the literature suggesting that mental health care education, specifically SP simulations, increases the knowledge and self-efficacy required of nurses to care for pediatric MH patients. This is likely due to incorporating experiential learning as a framework for educational design. Potential limitations to the results reported include a lack of pre- and post-requirement sample size (n=16) and the use of primary data tools the project manager developed. Despite the limitations, this pilot project suggests that an educational program including SP simulation aligns with the evidence and improves participant knowledge and confidence. The use of the *Pediatric Mental Health Standardized Patient Simulation Course* will expand to a nurse residency program in the next year.

Conclusion

Implementing a *Pediatric Mental Health Standardized Patient Simulation Course* improved non-mental health nurse self-efficacy in caring for mental health patients on the medical unit. This was validated not only through quantitative descriptive data but also qualitative feedback from the nurse participants. As caring for mental health patients becomes a norm for nursing in all units/divisions of nursing, investing in a learning environment where nurses can safely practice these challenging skills is important to ensure nurses feel prepared.

Keywords: Standardized Patient Simulation, Mental Health Simulation, Nursing Education, Nursing Simulation, Mental Health Education

Improving Medical Nurses Confidence in Caring for Pediatric Mental Health Patients: A Pilot Project Large Academic Pediatric Health System in the Pacific Northwest

Pediatric mental and behavioral health needs continue to increase across the nation. Approximately one in five children/adolescents have a diagnosed mental health condition, leading to increased hospitalizations for pediatric patients with these conditions. In pediatrics, mental and behavioral health problems include; Tourette Syndrome, anxiety, depression, behavioral conduct problems, developmental delays, intellectual disability, speech or other language disorders, learning disability, autism, attention-deficit, or attention-deficit/hyperactive disorder (NSCH,2019). Of the pediatric population aged 3-17, 21.4% in Washington (Figure 1, Appendix K), 22.6% in Alaska, 23.2% in Montana, and 23.2% in Idaho have some mental or behavioral health problem (National Survey of Children's Health [NSCH], 2019). Almost a quarter of the pediatric population in the Washington, Alaska, Montana, & Idaho (WAMI) region is experiencing a mental or behavioral health problem. These regional numbers align with the United States' prevalence of pediatric mental and behavioral health problems, with 22.7% of children having one or more diagnosed disorders. The long-term consequences of children's mental and behavioral health problems support the need for improved mental and behavioral health in the pediatric population.

Background:

Approximately ten percent of pediatric hospitalizations are for a primary mental or behavioral health condition (Canvara & Johnson, 2020). The increase in hospitalizations has resulted in patients being cared for on inpatient units, including medical, surgical, and intensive care units. These children admit to the inpatient medical/surgical units for two reasons. The first reason is that the inpatient psychiatric unit is at capacity, and patients overflow into the

medical/surgical units. The second reason is that the patient is admitted to the hospital for a medical/surgical diagnosis with a subsequent mental or behavioral health condition.

The transition of pediatric mental health patients' care from inpatient psychiatric units to medical/surgical units has resulted in several sequelae, including; staffing challenges, education gaps for clinicians, and risks for patient safety (Hazen & Prager, 2017). A large academic pediatric health system in the Pacific Northwest places pediatric mental health patients in the medical and surgical units when the inpatient psychiatric unit is at capacity. The 407-bed hospital has 40 licensed acute psychiatric beds in the psychiatric and behavioral medicine unit (PBMU) (Seattle Children's 2021). In early 2021 the PBMU had a consistent census exceeding 40 patients resulting in psychiatric patients being consistently cared for on the general medical unit. During the winter, the general medical unit had a census of 31 pediatric mental health patients. Nurses report feeling helpless, incompetent, and afraid to provide care for patients that require a skill set they have not practiced since nursing school.

Local Problem:

Medical Unit Nurses report feeling unprepared to care for pediatric mental health patients admitted to inpatient units. Most nurses do not receive pediatric mental health education outside of nursing school curricula. Additionally, only 6% of the current NCLEX exam assesses nurses' psychosocial integrity (NCSBN, 2019), and only a fraction of that is specific to psychiatric diagnoses. Nurses at a large academic pediatric health system in the Pacific Northwest report a lack of confidence and competence when providing nursing care for pediatric patients with mental health conditions. Structured interviews with medical nurses in the organization provided insight that nurses specifically feel "not" to "somewhat" confident in their ability to care for pediatric mental health patients. Commonly, these nurses indicated they feared that they would

"do or say something wrong" that might delay care progression. They expressed discomfort in communicating and interacting with their patients and felt that psychiatric specialists provided better care than they could. This lack of confidence and fear in the medical unit has increased the demand for psychiatric and behavioral health unit (PBMU) support requests on the medical unit.

With the pediatric mental health population growing, meeting these patients' needs is a priority. Not improving the confidence and competence of nursing caring for pediatric mental health patients on the inpatient unit may ultimately increase LOS, increased cost, increased risk for patient safety events, and decreased staff satisfaction.

Available Knowledge

Literature Review

In order to identify evidence-based interventions that could improve the nursing confidence in caring for pediatric mental health patients, a search strategy for the literature search was developed. The PICOT format (P =pediatric mental health patients admitted to medical/surgical units; I = best practices; C = NA; O = improve nursing care and confidence; T = NA) was used to develop the question, "What is the best practice to improve the nursing care and confidence for pediatric mental health patients admitted to medical/surgical units?" The databases CINAHL, PubMed, ProQuest, and Google Scholar, were searched (2011 to present) using the following keywords: pediatric, mental health, mental illness, psychiatric disorder, mental disorder, inpatient, acute, hospital, ward, unit, best practice, guidelines, evidence-based practice. The titles and/or abstracts from 16 articles were returned, with nine relevant to the identified problem (Appendix A). The Johns Hopkins Evidence-Based Practice Model was used to evaluate the evidence and synthesize the articles. A review of the articles identified one level one, five level three, and three level five articles (Dang and Dearholt, 2018).

A review of the literature helped to identify several interventions that could support the improvement of nursing care of pediatric mental health patients. Staffing ratios, de-escalation programs, education and resources, and access to mental health professionals were findings identified to improve nursing confidence and care of pediatric mental health patients.

Staffing Ratios

Patient-to-nurse ratios and nurse staffing models can impact patient care. Nurses who care for patients on the medical unit have a 1:4 nurse to patient ratio. Nurses report struggling to prioritize psychological care to patients with their existing patient loads (Vallieres-Noel et al., 2015). A descriptive study to identify nurses' experiences and needs in caring for pediatric mental health patients identifies the need for "lighter workloads" to allow nurses the space to provide psychological care (Vallieres-Noel et al., 2015).

De-Escalation Programs

De-escalation programs are standards of care in many organizations. Cohen Children's, Boston Children's, and Connecticut Children's have all implemented quality improvement (QI) projects to improve the de-escalation skills for their staff (Lelonek et al., 2018). Despite introducing and maintaining de-escalation programs, findings suggest that nurses still lack confidence and competence in de-escalation skills. One study conducted at a pediatric hospital found that 43% of nurses reported feeling confident in their ability to use de-escalation skills in practice (Parant, Pingitore, & LaRose, 2014). Educating on de-escalation techniques and skills may improve patient safety and empower staff to manage behavioral health crises (Hazen and Prager, 2017). Parant, Pingitore, & LaRose’s research; implementing a pediatric mental health curriculum that incorporated de-escalations techniques improved nursing confidence by 17% (2014).

Access to Mental Health Professionals

Nurses are not the only clinicians caring for mental health patients; most pediatric mental health patients admitted to the medical unit have a psychology/psychiatry consult. Nurses report challenges with communication between the psychiatry teams and the bedside nursing teams (Vallieres-Noel et al., 2015). Improving the relationship between psychiatric services and nurses caring for people with mental health conditions can improve nursing confidence and patient care. Non-psychiatric care providers must partner with psychiatric services to advocate for additional psychiatric resources (Hazen and Prager, 2017) and develop resources and guidelines to improve working relationships. Psychiatric services that are accessible and integrated with patients' nursing care decrease the length of stay, decrease cost, improve patient care, and increase staff satisfaction (Canavera and Johnson, 2020).

Synthesis of Evidence: Education and Resources

Education is a common intervention in all nine of the articles reviewed. A study in the United Kingdom surveyed healthcare professionals on their perspectives of pediatric mental health education's impact on their daily work. Ninety-nine percent of survey participants indicated that education would significantly impact how they work, 76% reported it would improve their confidence, and 76% reported it would improve their communication with pediatric mental health patients (Moran and Gutman, 2020). Traditionally, nurses on these units are not provided education in psychiatry or behavior management beyond nursing school programs to care for mental health patients (Canvara and Johnson, 2020). This education gap may lead to clinician anxiety and risks to patient safety (Hazen and Prager, 2017). In general, educational programs should include; risk assessment, behavior monitoring, and documentation of mental health status (Hazen and Prager, 2017). More specifically, educational content must

meet the unique needs of the pediatric population; this includes meeting the needs of both developmental ages (Kullgren et al., 2018) and neurodevelopmental conditions (Francesco et al., 2018). Recommendations are not specific to one type of educational program to educate nurses; however, the literature presents several educational delivery models. The Modular Approach to Therapy for Children (MATCH) educational program uses written resources, decision-making algorithms, and frequent feedback systems to educate clinicians on the specific program (Merry et al., 2020). A randomized control trial of clinicians that received MATCH education, compared to usual care, significantly increased the use of empirically supported patient mental health treatments (Merry et al., 2020). Using the QSEN framework for curricula development can improve the confidence in nurses caring for mental health patients. The study conducted by Parant et al. supports the need for pediatric mental health-specific education for pediatric medical nurses (2014). In the study, a multimodal curriculum that includes web-based training, extensive didactic session, and small group discussions increased nursing confidence by 43%, increased cognitive nursing knowledge and use of psychopharmacology by 37%, and increased the use of milieu therapy by 44% in a pediatric medical/surgical unit (Parant et al., 2014).

Education is essential to improving the pediatric mental health patient's nursing care on the general medical floor. Knowledge, skill, and ability gaps are common findings in the literature for nurses outside of psychiatric units. Table 1 (Appendix K) outlines educational needs described in the literature for nurses on non-psychiatric units caring for psychiatric patients. These topics are validated in conversations with nurses and nurse leaders employed on the medical unit where this project will occur. Nurses report fears that their limited knowledge of pediatric mental health care will cause harm to patients and delay care.

Simulation is a specific modality of education that can provide nurses with experiences that mimic the patient care environment. In the hospital setting, high-fidelity and high-technology simulations are gold standards. Mannequins to simulate a patient's medical condition are often used to support nurses' clinical decision-making and complete skills. A mannequin cannot simulate a patient in mental health due to the lack of non-verbal cues, facial expressions, and verbal feedback (Doolen et al., 2013). For that reason, the use of Standardized Patients (SPs) as a form of mental health high-fidelity simulation is emerging. SPs allow the nurse the opportunity to participate in a realistic scenario with a human as their simulated patient (Donovan and Mullen, 2018) while providing structured feedback on the patient experience (Doolen et al., 2013). A pilot study investigated the effects of SPs with 160 undergraduate mental health nurses. Upon completing the study, nursing students significantly increased their confidence in communicating with mental health patients (Donovan and Mullen, 2018). A second study identified that SPs for mental health improved undergraduate psych students' ability to think critically, complete a psychiatric assessment, and increase confidence in communicating with mental health patients (Witt, McGaughan, and Smaldone, 2018). Based on the evidence, this scholarly project will aim to implement pediatric mental health SP simulations to improve nurses' confidence in caring for mental health patients on the medical unit.

Rationale

Theoretical Model

Kolb's Experiential Learning Theory (ELT) (1984) provides the theoretical framework for the project and intervention development to improve nurses' nursing care and confidence in caring for pediatric mental health patients on medical-surgical units. Kolb's theory describes a learning cycle that requires active participation from learners and includes concrete experiences,

reflection, conceptualization, and experimentation (Fewster-Thuente & Batteson, 2017). As education is the consistently recommended intervention for improving nurses' confidence in caring for pediatric mental health patients on the medical units, Kolb's ELT serves as the framework for educational design. The literature supports Kolb's ELT, suggesting that experiential learning is translatable to nursing practice (Fewster-Thuente & Batteson, 2017).

Figure 2 depicts the process of Kolb's ELT (Appendix B). For educational intervention design, specific education supports each step in the 4-step cycle. The four steps in Kolb's experiential learning model are 1. Concrete experience, 2. Reflective observation, 3. Abstract conceptualization, and 4. Active experimentation. During a concrete experience, learners participate in an experience designed specifically for learning (Poore, Cullen, and Schaar, 2014). An example of a concrete experience is simulation. In Kolb's ELT, reflective observation occurs after a concrete learning experience. During reflective observation, the learner is guided through a process to discuss/debrief what they observed in the experience (Fewster-Thuente & Batteson, 2017). This allows the learner to connect the learning experience with cognitive processes and practice (Uhm, Ko, and Kim, 2019). After reflective observation, the learning shifts to abstract conceptualization. During this phase, the learner continues to reflect on observations identifying the impact of the educational experience and what could be done differently in the future to achieve a different or better outcome (Poore, Cullen, and Schaar, 2014). Finally, the learner will translate their learnings during the educational experience into another learning experience or nursing practice in the active experimentation phase. For this pilot study, education will follow the four stages outlined in Kolb's ELT.

Project Framework:

The Kellogg Logic Model serves as the framework for project organization and development. The Kellogg Logic Model provides a systematic way to comprehend the relationships between planned work and intended results (Kellogg Foundation, 2021). Planned work includes the resources and inputs required to implement program activities (Appendix D). Intended results include the outputs, outcome, and overall impact of the program activities implemented (Kellogg Foundation, 2021).

Specific Aims:

Addressing the need to expand pediatric mental health care in the hospital setting is a big feat and likely a series of projects. This DNP pilot project aims to identify and implement an education program that includes standardized patient simulation to improve nurses' confidence in pediatric mental health patients in the inpatient medical unit.

Context:

Population:

There are almost 2,000 nurses at a large academic pediatric health system in the Pacific Northwest. The health system is expansive and covers a large geographic area called the WAMI Region, including Washington, Alaska, Montana, and Idaho. The population that makes up the Hospital's pediatric community consists of a majority (33%) of patients from King County, 18% of patients from Seattle, 45% of patients from other Washington areas, 3% from Alaska/Montana/Idaho combined, and 1% from elsewhere (Seattle Children's, 2019).

The WAMI region is ethnically diverse (Table 2, Appendix K). Pediatric patients that seek care at the organization identify as either; White, Black, American Indian, Asian, Pacific Islander, Hispanic, or Multiracial (Centers for Disease Control and Prevention, National Center

for Chronic Disease Prevention and Health Promotion, Division of Population Health [DPH], 2019).

Setting and Resources

Nursing at the organization values improvements and innovations in nursing practice; this work is driven by the Department of Nursing Practice, Professional Development, and Innovation (NPPDI). NPPDI is well resourced and supports any organizational change and its impact on nurses. There are two salaried nurse scientists and a nurse biostatistician within the department to support and mentor Evidence-Based Practice (EBP), Quality Improvement (QI), and research projects. This pilot study aligns with the advancement of nursing professional development and practice.

Organizational Goals

In addition to being a hospital built on nursing excellence, the organization has significant financial resources to support its mission, vision, and values. The organization has a robust philanthropy and guild association with gross revenue of $1.33 million (Seattle Children's, 2021) to support organizational growth and development. In addition to the philanthropy and guild gross revenue, the hospital has a gross revenue of $2.57 billion, $2.4 million of which covers uncompensated patient care (Seattle Children's,2021). With operating margins in the "green" annually, the organization is flexible with spending related to quality improvement initiatives, such as a pilot project.

This pilot study will specifically focus on nurses who work on the organization's medical units. This 32-bed medical unit employs approximately 82 nurses. The nursing supporting structure for the unit includes 2-charge nurses per shift, 2-nurse managers, 1-clinical nurse specialist (CNS), and 1-nursing professional development (NPD) practitioner. The primary

diagnoses of patients admitted on the unit include; diabetes, seasonal respiratory illness, general gastrointestinal, liver/kidney pre-transplant services, and COVID-19 patients. Over the past year, the unit has expanded its scope to include eating disorders, general anxiety/depression admission, and other low-acuity mental health diagnoses. This was a slow evolution of expanded scope to meet the needs of the growing pediatric mental health population, and nurses began caring for the increased scope in patients without additional education.

Readiness for Change

The 2019 *Seattle Children's Community Health Assessment* identified the need to improve pediatric mental health care citing an increase in pediatric mental health diagnoses, including depression, anxiety, and adverse childhood experiences (ACEs) (Seattle Children's, 2019). As a result of the 2019 *Seattle Children's Community Health Assessment*, the organization has enhanced its strategic plan to improve pediatric mental health. In addition to organizational needs, nurses on the pilot project unit have specific educational needs to improve their confidence and competence in caring for pediatric mental health patients. A learning needs assessment for the unit nurses using recommendations of educational needs from the literature and the American Psychiatric Nurses Association (ANPA) *Psychiatric-Mental Health Nursing Scope and Standards of Practice* (2014). The author conducted the needs assessment with nurses who work on the unit via structured interviews and survey responses. Of the nurses in the unit, 28% participated in the learning needs assessment. Of those surveyed and interviewed, 100% indicated they would like additional education on the care of pediatric mental health patients. Specifically, respondents indicated a desire to learn about: mental health risk assessment (67%), pediatric psychiatric assessment (62%), and therapeutic communication (57%).

Strengths and Weaknesses

In addition to understanding both the organizations and the population's needs, understanding an organization's strengths, weaknesses, opportunities, and threats (SWOT) allow one to assess project implementation feasibility and assess potential barriers to implementation. Figure 3 (Appendix K) outlines the SWOT analysis of a large academic pediatric health system in the Pacific Northwest. The hospital's commitment to nursing excellence and nursing research are critical drivers in successfully implementing any EBP, QI, or research project. Nurse engagement is below the national average in the current work environment, and nursing turnover rates are high; both are apparent weaknesses. Lack of engagement and consistent staff make implementing and sustaining practice changes challenging. The organization currently has many projects to improve mental health, supporting becoming a pediatric mental health center destination. Projects that align with these opportunities are well received within the organization and nursing. The continued sequelae of the COVID-19 pandemic are risks to the organization. Focus on operating costs to promote financial resiliency through the pandemic and a national nursing shortage remain threats to the organization. Also, the recent announcement of a competitor freestanding children's hospital forty miles away poses a risk to the organization and its status of being the only freestanding children's hospital in the state of Washington. The organization has a historically high cost of care; the organization may financially suffer if individuals choose to seek care at another children's hospital due to decreased costs

MOU

A Memorandum of Understanding (MOU) (Appendix C) outlines the terms for this DNP pilot study between this author and Seattle Children's Hospital. Agreed terms include: project background, purpose, intended outcomes, duration, reporting plan, and naming preferences.

Interventions

Logic Model

In order to assess the effectiveness of the SP simulations for improving nursing confidence in caring for pediatric mental health patients, six short-term (ST) outcomes (Appendix D) were identified to measure intended changes after scholarly project implementation. The ST outcomes included measuring the change in nurses' confidence (ST outcome 3), increased nursing knowledge (ST outcome 1 and ST outcome 2), integration of mental health interventions in nursing documentation (ST outcome 5), and improvement of PBMU resource RN call volumes (ST outcome 4). Both resources and activities to support the achievement of the ST outcomes fall into subcategories: education, people, operations, and financial. Educational resources and activities focus on designing, developing, and implementing the simulation event and evaluation metrics. People resources and activities represent the personnel support required to complete each activity for each ST outcome. Operational resources directly affect unit operations, nursing practice, or operations related to facilitating a class. Lastly, financial resources support the operational, educational, and personnel activities.

Correlation of Interventions with Theoretical Model

This pilot study's literature review and theoretical framework informed the specific study interventions. Approximately twenty-four nurses that work on the medical unit will participate in the study intervention from June-July 2022. A total of six classes will be available for participants to sign up using the hospital's learning management system. Participants must complete a knowledge assessment and confidence survey prior to their class. These four-hour classes will consist of multimodal learning activities, including: didactic lecture, gaming, role-playing, and standardized patient simulation. The lesson plan (Appendix L) outlines the specific learning activities and objectives for this course. The course content was developed using

feedback from interviews with nurses and the literature review (Table 1, Appendix K) and will focus on de-escalation, crisis prevention, and therapeutic communication. The class will consist of six clinical nurse participants, six standardized patient actors, and three learning facilitators and will take place in a learning center facility. Room space includes a primary classroom with six break-out rooms for simulations.

The use of SP simulation to provide mental health education for pediatric nurses aligns with Kolb's ELT. Figure 4 (Appendix K) outlines the process of using an SP simulation as a Concrete Learning Experience as outlined by Kolb. The use of simulation allows the nurse to feel, do, and practice skills related to mental health in a safe and experiential learning environment. For SP simulation to be success, intentional simulation planning is essential. This includes simulation writing, pre-brief planning, debrief planning, and a simulation rehearsal.

To prepare for SP simulations, two simulations were written in collaboration with the medical unit NPD Practitioners using a standardized patient simulation template developed by the *Association of SP Educators* with DNP Student approval for use (Appendix O). The two cases written include a 17-year-old eating disorder patient simulation (Appendix P) and a 16-year-old suicidal ideation patient (Appendix Q). To test out the simulations and prepare the SP actors, a pre-intervention simulation will occur. Adjustments required to the simulation, pre-brief, or debrief will occur prior to the first simulation with clinical nurse participants.

Prior the start of each simulation a Pre-Brief will occur (Appendix M) with the intent to provide an orientation to the simulation (Rutherford-Hemming, Lioce, & Breymier, 2019). Upon completing the first 10-minute SP simulation experience the learner will participate in a 20-minute group debriefing (Appendix N). The simulation debriefing process aligns with Kolb’s Reflective Observation and Abstract Conceptualization stages of his model. The PEARLS model

will be used to debrief. This model of debrief outlines the purpose of a debrief, gauges initial reactions of the participants, describes the event using facts, analyzes the learner performance, and identifies areas that are applicable for future practice (Bajaj et al., 2018). The SP actor will participate in the debriefing session to provide feedback from the lens of a pediatric mental health patient. The learner will then move into the Active Experimentation stage of Kolb's ELT in two ways. Immediately, the learner will participate in a second 10-minute simulation experience to apply new learning concepts from the Abstract Conceptualization phase. After completing the second simulation, there will be a secondary 30-minute group debrief to focus on how the learning was applied and how the experience was different from the first. After the class, nurses will experiment in practice; the learner will apply new knowledge at the point of care, caring for pediatric mental health patients. One to two weeks after the class, the learner will complete a post-education confidence survey and knowledge assessment to measure change.

In the event of extenuating circumstances that prevent the DNP student from holding SP simulations or in-person learning, contingency plans are outlined in Appendix R.

Timeline

A project timeline (Appendix E) identifies the planning, implementation, data collection, data analysis, and information dissemination phases. Project planning will take place from August 2020 until April 2022. The problem will be identified early in the project planning phase, a literature review completed, and problem intervention identified. The project team, educational intervention, and supplemental resources will occur in the middle of the planning phase. In addition, IRB and an organizational MOU will be completed prior to project implementation.

Project implementation will take place from June 2022 through July 2022. During this time, the educational intervention developed using Kolb's ELT will be implemented for nurses

on the medical unit. Subsequently, initial data collection will occur during this time frame and include pre and post confidence surveys and pre- and post-knowledge assessments. Data collection will continue for four weeks post-intervention to assess nursing behavior change. Data analysis that includes descriptive statistics and developing the final report will occur between June and March 2023. Completing the pilot study and presenting the final report to Boise State University and Seattle Children's Hospital will occur in March 2023.

Measures

Both primary and secondary data will measure and describe the outcomes of this DNP project. Primary data sources include a learning management system (LMS) roster, DNP student-developed knowledge assessment, and DNP student-developed self-efficacy assessment. Short term (ST) outcome 1 (Appendix D) will use Cornerstone's learning management system to track SP simulation course enrollment using a roster. ST outcome 2 (Appendix D.) data will be collected using the DNP student-developed knowledge assessment, *Pediatric Mental Health Knowledge Assessment* (Appendix S). Knowledge assessment development is informed using the course objectives (Appendix L). While reliability and validity will not be determined with this student-developed tool, a Ph.D. prepared psychiatric nurse researcher will review the tool to ensure content is representative of the concepts measured. The knowledge assessment will be assigned and completed in the *Cornerstone* LMS. ST outcome 3 (Appendix D) data will be collected using the DNP student-developed confidence assessment, *Pediatric Mental Health Self-Efficacy Assessment for Non-Psychiatric Nurses* (Appendix F). This self-reporting confidence survey will be developed using *Bandura's Guide for Constructing Self-Efficacy Scales*. The survey questions will align with the course objectives, and nurses will self-report on their ability to do the competencies on a scale from 0-100 (Appendix T). A Ph.D. prepared

psychiatric nurse researcher will review the questions. Survey data will be collected using RedCap, and each user will have a unique and confidential identifier. In addition to the primary data collection, secondary data will be collected for ST outcomes 4 and 5. ST outcome 4 (Appendix D) data will be collected through an existing call-log in the PBMU and ST 5 (Appendix D) data will be collected using EPIC documentation in the nursing care plan. Specific data collection for ST outcomes 1-5 is outlined in Appendix F.

Data Analysis

Data analysis is an essential step in the DNP project process. Analyzing data transforms quantitative data into interpreted and meaningful information on the project's outcome (Moran et al., 2020). Quantitative analysis will be used for data collected supporting short-term outcomes 1-5 and is described in Appendix F. ST 1 will use frequency distribution and cumulative percentage to determine the completion totals of nurses in the medical unit. Analysis for ST 2 includes a cumulative percentage of test scores, percent distribution of participants that score >80%, the average (mean) pre and post test scores, and range. ST 3 will take a similar approach to data analysis as ST 2, minus the cumulative scores to inform a measurable change in nurse self-reported confidence. ST 4 will include range and mean to understand the average number of calls per week. Lastly, for ST 5, percent distribution will be used to analyze the percentage of patients who have completed (100%) or partial completion (50%) of documented mental health interventions.

Ethical Considerations

Ethical Considerations and Protection of Participants

In this pilot study, the DNP student's responsibility is to protect the participants, maintain confidentiality, protect privacy, reduce bias, and prevent harm (Zaccagnini and Pechacek, p. 10,

2021). In order to prepare for the scholarly project, this author completed *CITI Program* education. This education provides the learner with content specific for social and behavioral research and projects similar to this DNP project.

In addition to understanding how to protect human subjects, the DNP student will apply for IRB approval through Boise State University for the scholarly project in the project planning phase. The IRB process will ensure the protection of participants and provide a reporting structure should reporting be needed. Several other ethical considerations to protect the participants during project development. If required, informed consent will be obtained prior to participants' interaction with the pilot study. Consents will be documented and stored in a secure database per the organization's recommendations where the pilot study will take place, maintaining participant privacy. The Research Electronic Data Capture (REDCap) software will maintain any personal data collected during the scholarly project to protect participants in the study. REDCap is a software that a user can build a data collection tool and store collected data in a manner that meets HIPAA compliance standards (REDCap, 2021). REDCap will protect the privacy and maintain the confidentiality of the participants in this scholarly project pilot study.

Conflicts of Interest

Identifying conflicts of interest is an essential consideration in project development. No financial, personal, or commercial conflicts of interest were identified for this project.

Biases

The two specific tools required for this pilot study include a nurse confidence survey and a pediatric mental health knowledge assessment tool. To reduce the risk of bias, a Ph.D. prepared psychiatric nurse scientist, and nursing biostatistician will review all tools prior to

implementation. This is performed to eliminate leading, assumptive, poorly worded, and confirmation bias questions.

Threats to Quality

There are approximately 80-nurses eligible to participate in this pilot study. In order to meet a goal of 30% participant completion by August 2022 (Appendix D), 24 nurses must participate. To encourage participation, unit managers will approve SP simulation as paid continuing education hours for nurses in 2022. Two key stakeholder groups exist; the clinical practice managers (CPM) and the scheduler teams. The DNP student will partner with the CPM team to approve the SP simulation time; using a separate cost center for education will aid in this approval. The DNP student will subsequently partner with the scheduling team to pre-schedule nurses into classes to mitigate other scheduling conflicts. Recruitment strategies include providing continuing education (CE) credits for the course, engaging with unit-based shared governance, and educational flyers (Appendix U).

The second potential threat is an organizational shift in resource allocation. Competing educational funding priorities for all employees include nurse staffing, Equity/Diversity/Inclusion (EDI) education, and organizational de-escalation training. In order to best plan for potential changes in organizational resource allocation, securing funding for this project that is specific to nursing will help protect the budget. The DNP student will utilize approved financial resources for nursing education.

IRB Project Determination

The Institutional Review Board (IRB) at Seattle Children's Hospital determined the status of this DNP project. After the project review, the IRB gave an IRB determination of "Not Human Research" (Appendix J).

Project Budget

DNP project budget provides the financial information necessary for organizational decision-making to implement a DNP Project (Moran, 2019). Implementing an educational program to improve nursing confidence in caring for pediatric mental health patients requires resources and expenditures. Table 1. (Appendix G.) describes the first-year expenses required to implement this DNP project; expenses include personnel, materials & supplies, equipment, information technology (IT), and facility space. The first-year project expense totals $46,369.97. Personnel expenses comprise the majority of year one project expenses totaling $43,384.00. Personnel includes; DNP student project management time, clinical RN education time, Unit-Based Educator & Unit-Based CNS wages, data analyst support, administrative support, and standardized patient actors. The next highest category of expense is educational space; conference room and break-out room rental totals $1,680. Space is followed by equipment needs that include computers, printers, and A/V support, resulting in $859.97 of expenses. IT subscriptions to applications that support data collection and material development add an additional $390.00 annually. Lastly, material and supply expenses are minimal at $56.00.

While the financial burden of project development will not be present in years two and three of project implementation, expenses will increase over the following two to three years after implementation. Table 1. (Appendix H) describes the three-year project budget; over the first three years of the program, the expenses will increase from $46,369.97 to $137,319.00 to $144,055.00. As this DNP project is a pilot, participation will increase over time to educate all nurses within the organization within three years. The increase in participation will increase personnel expenses. Additionally, a nursing union contract ratification between years one and two of the project will increase the clinical RN wages. The average historical increase of clinical

RN wages at the organization is 7%. In addition to an increase in clinical RN personnel and clinical RN wages, inflation will add to materials, supplies, and space expenses. According to the U.S. Bureau of Labor Statistics (BLS), the average annual inflation rate is 2% (2021). Table 1. (Appendix H) reflects all of these increases.

During the DNP Project implementation phase, a nursing research grant and in-kind donations serve as revenue to support the project expenses. In-kind donations for this DNP project include donated project management time from the DNP student, wages for learners, facilitators, and actors, IT, materials & supplies, equipment, and space provided by the organization. Table 1. (Appendix I) provides that statement of operations for the first year; project expenses are offset by in-kind donations resulting in an operating income of $0.00.

Sustainability

This DNP project is a Pilot Study in one unit within the organization. Moran et al., outlines four factors of a sustainability plan; obtaining buy in for continued support, defining long and short-term strategies, acquiring resources, and defining the ongoing process (2020). Keeping those factors in mind, a thoughtful sustainability plan includes reporting findings to senior leaders and seeking approval for program expansion. Program expansion includes educating existing nursing staff in all of the inpatient units at the hospital; the financial and operational resources required for this are outlined in years two and three in the three-year budget plan (Appendix H). Beyond educating existing staff, a sustainability plan will be required for all nurses that are new to the organization. This would include thoughtful building of the class into nursing orientation. By doing this, the orientation budget could be utilized to finance the course for participants. To mitigate the costs associated with hired actors for SP simulations, considerations for academic-practice partnerships are encouraged. This may include partnering

with local universities' school of art programs to establish monetary and non-monetary incentives for students to participate as SP simulation actors.

Results:

Intervention Steps

Project implementation consisted of facilitator/Standardized Patient (SP) training and six planned classes over eight weeks (June 1-July 29, 2022). A training day was held to ensure that all facilitators and SP actors felt prepared to participate in the course and simulation. This training day consisted of a review of the pre-brief process (Appendix N), practicing the Eating Disorder Simulation (Appendix Q) and Suicidal Ideation Simulation (Appendix R), and reviewing the debrief process (Appendix O). Several key improvements were made from the training day feedback, including the timing of simulations, facilitator notes on how to move the simulation forward, and additional tools to support participant success in the simulation. The associated simulation, pre-brief, and debrief guides were updated to reflect the necessary changes before class on June 10th, 2022.

Before starting classes, participants completed a pre-knowledge and self-efficacy assessment. Feedback from course participants was that the amount of pre-work felt significant. Modifications were made to the class to allot thirty minutes for participant pre-work. The lesson plan (Appendix M) reflects the changes to completing pre-work and class time. During class, participants completed one and a half hours of education in trauma-informed care, crisis identification, and verbal engagement strategies. This education used a multimodal approach and included gaming, group case study, gallery-walk, and teach-back methods to support the learning experience.

The last two hours of the class consisted of two SP simulations: including a suicidal ideation and eating disorder patient. Each simulation consisted of a standardized pre-brief, five

minutes for learners to review simulation materials and ask questions, a 12-minute simulation, and a 30-minute standardized debrief using the PEARLS debrief method. Upon completing the four-hour class, participants completed a reaction survey related to the learning experience. While not originally planned, this survey (Appendix W) provides qualitative reactions to the class and self-reported learnings that could be translated to practice. A 'thank you' e-mail, a follow-up self-efficacy survey, and a knowledge assessment were sent to participants one week after class.

A standard work process was developed to ensure standard process and practice was used with each *Introduction to Pediatric Mental Health SP Simulation* class (Appendix T). The standard work process includes course reminders sent to participants and facilitators, SP actor simulation reminders, reaction survey immediately post-class, SP actor payroll, learning management system (LMS) roster management, and post-education knowledge assessment and self-efficacy survey communication.

Process Measures & Outcomes

Demographics of course participants were collected at the start of each class, consisting of age, years of nursing experience, years of nursing experience at the pilot organization, hired FTE, shift, and nurse participation in shared governance or nursing practice/professional development activities (Appendix Z). Most participants (53%) were aged 30-39 (Figure 8, Appendix Z). Participants had various years of nursing experience; the most significant percentage (35%) was nurses between 11-20 years (Figure 9, Appendix Z). Additionally, 65% of participants actively participate in at least one shared governance or nursing practice/professional development activity (Figure 13, Appendix Z).

Before implementation, five short-term outcomes were identified to measure the success of the pilot study. Appendix X outlines the five identified short-term outcomes and their status upon completion of the implementation period.

Short-Term Outcome 1 (STO1): By August 2022, 30% of nurses on the pediatric medical units will have participated in pediatric mental health standardized patient simulations. This outcome was not met as only 22% (20/90) of eligible medical nurses participated. Figure 5 compares the number of eligible nurses, the goal number of nurses, actual nurse participants, and the number of participants that completed data (Appendix Z).

Short-Term Outcome 2 (STO2): Table 3 illustrates that the average score of participants post-education was 77% (Appendix AA). While STO2 was not met, the class average increased by 4% (Table 3, Appendix AA).

Short-Term Outcome 3 (STO3): Pre- and post-self-efficacy surveys demonstrate an improvement in nurse participants' reported ability to care for mental health patients. There was an average of 25% improvement in reported self-efficacy (Table 4, Appendix BB), indicating that STO3 has been met. On the individual level, each participant reported an increase in self-efficacy ranging from 4-37% (Table 4, Appendix BB).

Short-Term Outcome 4 (STO4): A pre-implementation and post-implementation timeline were identified to measure call volumes. Pre-implementation (3/17/22-5/31/22), call volumes from the medical unit to the behavioral support team were 0.6 calls/day (Table 5, Appendix CC). Calls increased post-implementation (6/1/22-7/15/22) by 20% to a rate of 0.8 calls/day. While the increase in calls indicates that STO4 was not met, the reasons for calls changed. Table 6 outlines that calls requesting support with SI patients and ED patients increased while calls for direct patient care requests decreased (Appendix CC).

Short-Term Outcome 5 (STO5): STO5 was unable to be measured; the reporting function for care plans changed in the EMR.

Several unintended and additional outcomes were measured because of this pilot study. The first is measuring the trend in Medical Unit EMR Documentation for suicide risk assessment and patient belongings search/assessment. The SP simulation event simulated the suicide risk assessment and belongings search. Figure 13 outlines a decrease in suicide risk assessment documentation from 21% to 18% from April 2022-August 31,2022 (Appendix DD). In contrast, the completion and documentation of patient belongings search increased from 36% to 49% from April 2022-August 31, 2022 (Figure 14, Appendix DD).

The post-class reaction survey provided qualitative feedback for the pilot study. Table 6 outlines nurse participants' self-reported learnings immediately post-class (Appendix EE). Learnings include; setting boundaries with patients/caregivers, integrating trauma-informed nursing practices into patient care, providing choices to patients/caregivers, and strategies for communicating with mental health patients.

Table 7 outlines general feedback responses from nurse participants related to the course (Appendix EE). General responses included "Amazing," "Excellent," "Thank you," and "I learned a lot and am grateful for this learning opportunity. I think every medical nurse should take this training".

Contextual elements and associations

Several contextual elements within the pilot study organization affected the project's outcomes. STO1 sought to have 30% of medical nurses participate in the study. Thirty-four nurses were initially enrolled in the six classes from 6/1/22-7/29/22. Unfortunately, two classes were canceled due to staffing, resulting in eleven participants' loss. Additionally, one nurse

called in sick for a class and could not reschedule. The planned six classes were decreased to four with 20 participants.

Another contextual element that impacted the pilot study was an unexpected organizational increase in resource support for the PBMU behavioral response team. The additional resources allowed for 24/7 behavioral resource team support. The increase in support impacted the frequency of calls and the call log documentation. The call log existed in March 2022, and pre-implementation call log data (3/17/22-5/31/22) was in a state of early adoption. Documentation of calls was inconsistent for several months based on who was in the role each day. With the increase in new behavioral resource team members and value is seen in the call log, documentation of calls increased in the post-implementation (6/1/22-8/31/22) timeframe.

A positive contextual element that may have impacted the pilot study included increased eating disorder assignments available for nurses on the medical unit. Post-class, nurses reported being able to practice skills learned in both the ED and SI simulation at work; feedback during rounding was consistent that nurses who took the class felt more confident caring for eating disorder patients. One new graduate nurse reported, "it was actually easier than simulation."

Missing Data

Of the 20 participants, only 16 completed both the pre and post-survey requirements resulting in an 80% completion rate of the course. This limited the ability to analyze the outcomes of the SP simulation course, and actual knowledge and confidence gained were only measured for some participants.

Actual project revenues/expenses

Actual project revenues and expenses are reported in the revised statement of operations (Appendix FF). The first-year project budget total was projected to be $46,369.97. This included room space, DNP student time, materials, and personnel. The actual project expenses were $2,347.00 over the projected cost. This results from the need to purchase simulation supplies that the project manager had not budgeted initially and increase the SP actor wage from $20 per hour to $50 per hour to remain competitive with the SP actor market.

Interpretation:

Key Findings:

This scholarly project sought to improve nurses' self-efficacy in caring for pediatric mental health patients. Quantitative and qualitative primary data findings support the aims of the project. For the 16-nurses that completed pre and post-self-efficacy surveys, and overall confidence score increased by 25% (Table 4, Appendix BB). This directly supports the aim. Additionally, the reaction survey (Table 6 & Table 7, Appendix EE) post-SP simulation course indicated a positive learning experience that would translate to nursing practice. Several secondary findings may support increased medical nurse confidence in caring for MH patients. One of these findings is a decrease in Behavioral Support Resource nurse educational and coaching needs by 8% (Table 5, Appendix CC), as reported in the call log. Another secondary data finding demonstrating a potential improvement in nurse confidence is increased patient belonging searches from 36% to 49% (Figure 14, Appendix DD) during the implementation timeline. Patient belongings searches were simulated during the MH SP simulation course. Lastly, while not directly related to confidence, nursing knowledge did increase overall by 4% (Table 3, Appendix AA).

Comparison of results with findings from literature

Education, specifically education incorporating SP simulations, has demonstrated an improvement in both nursing confidence and knowledge. Studies have indicated that using SP simulations for therapeutic communication has significantly improved nurse confidence in pre and post-confidence scores (Donovan & Mullen, 2018). While the significance of this scholarly outcomes project was not measured, an increase in pre- and post-confidence by 25% aligns with the evidence. Additionally, mental health SP simulation experiences improve knowledge significantly (Witt, McGaughan, & Smaldone, 2018). While the knowledge of the participant increase did not meet the intended outcome goal, it did increase overall by 5% for participants.

Impact on people and systems

The Introduction to Pediatric Mental Health SP Simulation Course positively impacts nurse participants. Self-reported learnings (Table 6, Appendix EE) from nurses that participated in the course include; setting clear boundaries with patients, understanding how to offer choices within the constructs of patient care plans, and strategies for trauma-informed communication with patients and caregivers. While there was no mechanism to measure the impact beyond these learnings, research suggests that workforce confidence is attributed to a positive patient experience (Owens & Keller, 2018). Nurses were also engaged in the education, which was made clear through their post-education reaction survey (Table 7, Appendix EE). Nurses shared gratitude for the course, requested more simulations, and encouraged others to take the course. This level of engagement with learning has been limited since the start of the COVID-19 pandemic, and the increased opportunity to simulate in an experiential learning environment may shift that culture.

Reasons for differences between observed and anticipated outcomes

Nurse staffing shortages and an abnormally high seasonal patient census led to challenges in meeting participation goals. As mentioned above, this resulted in the cancellation of two classes. Canceling classes did not just impact the participation outcome goal but potentially impacted the knowledge and confidence measures, decreasing the pool of available data to analyze.

It was anticipated that nurse knowledge would increase by more than 4% as a collective cohort. Some potential reasons for the discrepancy in intended and actual outcomes could be that the test was not tested for validity and reliability. It is possible that the lack of validity and reliability meant the knowledge test did not measure what was intended. Additionally, participants took the pre-test in a controlled class environment and were expected to take the post-test on their own time. This meant participants completed their post-test during a shift where distractions may have impacted the nurse's ability to focus and answer correctly. The lack of validity/reliability and the lack of a controlled environment may have contributed to a decrease in the post-knowledge assessment score for five participants (Table 3, Appendix AA).

The simulation had nurses complete suicidal ideation (SI) assessment on the patient. It was anticipated that this would improve overall suicidal ideation assessment documentation; however, documentation decreased over the project implementation timeline. This is likely not a result of the SP simulation course. During each debrief session, the requirement for completing an SI assessment was discussed. Nurses were unaware that this was a requirement of their role, indicating a knowledge gap in this nursing practice on the unit. This scholarly project only addressed the SI assessment, with 20 participants indicating a continued education gap in the rest of the unit.

Efforts made to minimize and adjust for project limitations

There were several limitations identified in this project. The first, as mentioned above, is using self-efficacy and knowledge assessments written by the SP owner, resulting in tools that lack validity and reliability. To best mitigate this limitation, all tools were reviewed by a PhD-prepared nurse scientist with expertise in mental health research.

While the best attempts were made to develop the tools, the actual efficacy still needs to be understood.

Another limitation identified was the sample size. Having 20 participants take the course does not yield an extensive data set to analyze. A more robust sample would increase the amount of pre- and post-data to determine the further effectiveness of this pilot study.

Finally, each participant was limited to simulating one of the two scenarios in each course. While the learners had the opportunity to observe both scenarios, they only experienced one as the care provider. While the concepts were translatable, it is possible that the nurse felt more confident in caring for the diagnosis of the patient with whom they participated in the simulation. For example, nurses who participated as the care giver for the ED simulation may have reported a higher self-efficacy in caring for ED patients than SI patients.

Implications for Policy Development

Nurses' education to care for mental health patients is not required outside of nursing school and NCLEX preparation. There is a knowledge and confidence gap for nurses not trained in psychiatric nursing care in their ability to care for mental health patients. As the mental health crisis grows for pediatric and adult patients, it is recommended that policy is developed to support the educational needs of nurses. Policy development can be enacted at the organizational and governmental levels. The healthcare organization can implement continuing education programs to further empower non-psychiatric nurses in their knowledge, skills, and abilities to

care for mental health patients. At the government level, one way to ensure nurses' knowledge gaps are met is by mandating continuing mental health education required for nurse licensure. Additionally, advocacy for policies that allocate government funding for healthcare organizations to provide educational programs will aid in the adherence to mandatory continuing education requirements.

Conclusions:

Usefulness of Work

While only one of the five outcome goals were met (Appendix x), using a *Pediatric Mental Health Standardized Patient Simulation Course* improved non-mental health nurse confidence in their ability to care for mental health patients on the medical unit. This validates the importance of experiential learning on nurse self-efficacy in caring for patients. The importance of creating space for nurses to practice caring for mental health patients was found to be valuable and can be translated to organizations of all sizes. This scholarly project provides an experiential education framework and design that organizations can implement in their institutions.

Sustainability

There was significant interest from multiple nursing departments in this scholarly project, making it evident that the desire for SP simulations and mental health care education is prevalent in the organization. After discussions with stakeholders, it was determined that elements of this SP course could be implemented into existing courses or curricula with the framework designed by the scholarly project manager. The nurse residency program will be the first to integrate the scholarly project into an existing program. They will implement course content and SP

simulations into their new graduate nurse curricula to practice crisis management and trauma-informed care principles for nurses from all units.

Potential for Spread to other Contexts

This scholarly project was a pilot study on a pediatric medical unit and can be expanded beyond the pilot unit. Mental health patients are consistently admitted to the Emergency Department and Pediatric Intensive Care Unit. Additionally, concepts taught include trauma-informed care and crisis management, which both apply to patients and patient caregivers, thus increasing the potential spread to another context. To keep the content of the SP simulations relevant to other units or contexts, the scholarly project manager can partner with stakeholders in various areas to design simulations that align with situations seen in each given care area.

Implications for Practice and Further Study in the Field

The use of mental health education and SP simulation improves confidence in nurses caring for mental health patients. This implies the need to integrate SP simulation into hospital-based nursing continuing education and onboarding curricula.

Recommendations for further study include analyzing the data to determine the significance of outcomes achieved through the pilot study. Additionally, as this was a pilot study, increasing the number of participants will clarify the intended patient care outcomes associated with this experiential education. Future studies should explore the long-term patient outcomes of this educational intervention.

Next Steps:

This pilot will include the nurse residency program over the next year. The expansion comes with a test in scalability and relevancy to learners from multiple units. Additionally, the

expansion will test the project's translatability from pilot project to programmatic operations by embedding it in a curriculum that operates four times a year.

Dissemination of this scholarly project includes presenting findings to students, faculty, and colleagues at the implementation organization and the academic program. Additionally, dissemination will include submitting abstracts to several national conferences, including Magnet, the Association of Nursing Professional Development, and the International Nursing Association for Clinical Simulation and Learning for podium presentations. Lastly, this DNP Project will be submitted for publication in either a journal of nursing education, nursing leadership, or nursing simulation.

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Appendices

Appendix A: Literature Review Summary Table

TITLE OF ARTICLE	AUTHORS	RESEARCH QUESTION OR AIM OF THE ARTICLE	TYPE OF STUDY (DESIGN)	LEVEL OF EVIDENCE	QUALITY OF EVIDENCE	DESCRIPTION OF SAMPLE (IF APPLICABLE)	OUTCOME MEASURES	RESULTS/KEY FINDINGS
Problem Supporting								
Understanding the Unique Needs of Hospitalized Adolescents and Young Adults Referred for Psychology Consults	Kristin A Kullgren Sarah K Sullivan Terrill Bravendar	Understanding the differences between referred children and AYA (Adolescent and young adult) hospitalized patients with psychology consults	Retrospective Quantitative Non-Experimental Study	III	**B**	**Sample:** N=1091 • 408 Children (≤11) • 683 AYA (12-24) **Inclusion Criteria:** • Hospitalized patient that received psychology consult • 9/26/2011-2/27/2016 **Exclusion Criteria:** • Automatic referrals for patient medical diagnosis (i.e. BMT)	**Data Obtained: Retrospective chart review Included:** • Demographics • Primary medical diagnosis • Consultation information • Intervention information **Data Analysis:** • SPSS	**Unique AYA Needs:** • Increased referrals for female AYA than children (p=0.001) • Interventions are more likely to be prescribed for children compared to AYA in the hospital • AYA LOS is shorter than child **Recommendations:** • Education and

						• Duplicate referrals **Location:** Tertiary pediatric hospital	• 19 independent sample t-test and X^2test **Variables:** **Independent:** • Age Group **Dependent:** • Demographics • Pertinent Medical Information • Consultation information • Intervention information	competencies related to AYA specific MH • Children and AYA have different MH needs as hospitalized patients
Falls in Hospitalized Children with Neurodevelopmental Conditions: A	Francesco Craig Rosanna Castelnuovo	Investigate in-hospital falls among children with neurological or	Cross-Sectional Correlational Study	III	**A**	**Sample:** 446 pediatric patients **Inclusion Criteria:**	**Demographics and Clinical Data:** Obtained the week	**Neuro Development vs Neurological** • Higher incidence of hospital falls

Cross-Sectional Correlational Study	Rossella Pacifico Rosaria Leo Antonio Trabacca	neurodevelopmental disorders				• Patient admitted with neurological or neurodevelopmental disorder • Assessed IQ through standardized test • Between 1-17 years of age **Neurological Group:** Epilepsy, CP, SMA, NFM, MD **Neurodevelopmental Group:** ADHD, ASD, Global Developmental Delay, OCD, Tic Disorder, Speech/language disorders	prior to fall prevention program implementation **Statistical Analysis:** • Descriptive Statistics • Statistical Significance • Variance Testing	for developmental group: p = 0.003 **Neuro development Differences:** **Age:** • Children <3 years have higher risk of falls compared to all other age ranges (p=0.001 for all group comparisons) **Findings:** • Impulsive behaviors and decreased concentration and self-control increase the risk for falls • Fall prevention education

								must be implemented in children with neurodevelopmental conditions
A Quiet Crisis: Pediatric Patients Waiting for Inpatient Psychiatric Care	Eric P. Hazen Laura M. Prager	Describe the current challenges with "Boarding" pediatric mental health patients in the Emergency Department and Inpatient Units	N/A-Integrative Review and Clinical Statement	V	**A**	N/A	N/A	**Challenges with Pediatric Mental Health Patients on General Inpatient Units:** • Difficult to keep at risk patients safe • Non-secure unit entries increase risk for elopement • Playrooms create risk for sharp objects, projectiles, and cords **Challenges with Pediatric Mental Health Patients and Staffing:** • "Sitters" used for patient safety are

								often not trained and ineffective • Nurses and physicians are not properly trained to manage patients with mental illness • Anxiety, uncertainty, and resentment develops for staff **Recommendations:** • Education- Nurses, physicians, and ancillary staff on risk assessment, monitoring, and documentation
Integrating Mental Health Care for Medically	Kristin Canavera	Describe the problems associated with	N/A- Integrative Review/	V	**A**	N/A	N/A	**Challenges with Pediatric Mental Health Patients on**

Complex Children	Liza-Marie Johnson	medically complex children who have mental health disorders that are housed outside of psychiatric units.	Clinical Statement					**General Inpatient Units:** • Lack of credential to manage patients • Lack of intensive or family-based counseling • Lack of training in: crisis prevention, psychiatry, & behavior management **Recommendations:** • Educating inpatient nurses in crisis prevention, behavior de-escalation, suicide precautions, and mental health conditions/ treatment

								• Advocacy to prioritize mental health care at children's hospitals • Increase the availability through psychiatric consultation-liaison services.
Potential Problem Solutions								
Effect of Clinician Training in the Modular Approach to Therapy for Children vs Usual Care on Clinical Outcomes and Use of Empirically Supported Treatments	Sally M. Merry Sarah Hopkins Mathijs F.G. Lucassen Karolina Stasiak John R. Weisz	Does MATCH increase the delivery of empirically supported treatments, clinical outcomes, and care delivery?	Randomized Clinical Trial Multi-Site, Single Blind	I	**A**	**Clinician Inclusion Criteria:** • Provided clinical treatment to pediatric patients in family • Provided written and informed consent • Included nurses, social work, psychology	**Primary Outcomes:** • Trajectory of change in clinical severity • Competency of clinicians using EST • Efficacy of service delivery • Treatment	**Trajectory of change in clinical severity** • No significant differences **Competency of clinicians using EST** • Adherence to program delivery: 56% p=0.002 • Competency in program delivery: p=0.003 **Efficacy of service delivery**

	Christopher M.A. Frampton Sarah Kate Bearman Ana M. Ugueto Jennifer Herren Ainsleigh Cribb-Su'a Denise Kingi-Uluave Jik Loy Morgyn Hartdegen Sue Crengle					**Pediatric Criteria:** • 7-14 • Diagnoses of anxiety, depression, trauma, or disruptive behavior **Sample Size:** • 65 clinicians ○ Mean Age: 38.7 yrs • 206 Pediatric patients ○ 200-completed program ○ 164-completed 3 month follow-up	satisfaction	• No significant differences **Clinician Satisfaction with Treatment** • P=0.002 5-day Training in MATCH is consistently associated with improved levels of EST delivered.

An Educational Program to Promote Competency in Pediatric Psychiatric Mental Health Nursing	Rebecca L. Parant Francine R. B. Pingitore Jenifer A LaRose	To educate pediatric medical-surgical nurses on the KSAs necessary to care for pediatric inpatients with psychiatric and mental health disorders	Non-Experimental quantitative study	III	**B**	Convenient sample of 31 pediatric medical/surgical nurses in 30-bed unit **Avg years of nursing experience:** 15 **Avg age:** 40 **Identified Gender:** Female **Education:** *ADN:* 17% *BSN:* 83% *CPN*: 25%	**Tool:** • Organization developed pre & post curriculum assessment survey • 10-Questions **Interval:** • Pre-intervention • Reaction – immediately after intervention • 6-mos post-intervention **Response Rate:** • **Pre:** 52% • **Immediate:** 100%	**Results:** • Increase in use of milieu therapy area - 44% • Increase in confidence caring for pediatric patients with psychiatric conditions- 43% • Increase incorporation of psychopharmacology into patient care- 37% **Gaps Identified Prior to Intervention:** • Use of milieu therapy principles • Knowledge of psychopharmacology • Pediatric assessment • De-escalation techniques

							• **6-mos:** 39%	• Assessment of suicidal and homicidal ideation **Use of QSEN** • Competencies in terms of KSAs provide structure for educational design
Exploring the Needs for Support of Pediatric Nurses Caring for Children with a Mental Health Disorder Hospitalized in Non-Psychiatric Unit	Marie-Michelle Valliere s-Noel Schnell Garcon Christin a Rosmus Francois e Goulnik Melanie Lavoie-Trembla y	The purpose of the study is to explore the experiences and the needs for support of pediatric nurses caring for children with a MH disorder in non-psychiatric units **Specific Questions:** What is the experience of the nurse?	Qualitati ve-Descripti ve Study	III	**A/B**	**Unit:** • Medical and surgical units at a pediatric teaching hospital in Quebec **Patient Population:** • Pediatric patients 0-18 • Any medical/surg ical condition • Any subsequent MH condition **Sample:**	**Data Obtained:** • Socio-demogra phic question naire • 30-minute private interview • Intervie w based on literature • Open-ended and follow-up questions	**Themes:** **Ongoing powerlessness loop of care:** **Not knowing what to do** • Lacked the knowledge and experience to care for the MH population • Felt MH patients in assignment were not priority **Ensuring safety and basic care**

		What support do they need?				• Purposive sampling • 17-nurses	**Data Analysis:** • Thematic Content Analysis	**Gaps in MH Resources** • Psychiatric team support • Visibility to patient plan of care • Lack of standardized psychiatric protocols **Feeling helpless** • Nurses felt they could do more but were unable to • Frustrated on having to wait for psychiatry and not having tools available to care for patients **Nurse Identified Needs:** • Education about MH • Education on how to make

								the care received in inpatient units more beneficial for their psych diagnosis • Quicker access to MH professionals • Inpatient nurse involvement with MH plan of care • Lighter workloads/staffing model to accommodate MH patient needs.
Mental Health Training to Improve Communication with Children and Adolescents: A Process Evaluation	Rachel Moran Leslie Morrison Gutman	Characterize the intervention components, mechanisms of change, and barriers to the implementation of We Can	Qualitative Research Design-Process Analysis	III	**A/B**	**Sampling:** Opportunity Sample **Sample Size:** 10 **Inclusion Criteria:** Completed WCT training at	**Tool:** Consolidated Criteria for Reporting Qualitative Research (COREQ) **Qualitative Interviews:**	**Document Analysis Results:** • WCT focuses on staff development and improvement of knowledge and skills to

		Talk (WCT) training. i.e.: What are the mechanisms or change and barriers to the implementation of training learnings				least 2-weeks prior to interview Work in pediatric unit	30-minutes Socioeconomic data survey 22-Questions Thematic analysis Reliability check of 93.88% **WCT Document Analysis:** Inter-rater reliability Coded using BCTTv1 Mapping Reliability check of 93.15%	communication • WCT does not address barriers related to physical or social factors in the hospital environment that make communication challenging **Qualitative Interview Themes:** • Increased understanding of the pediatric mental health patient and their feelings • Increased cognitive and interpersonal skills • Understanding Stigma • Understanding the physical environment

								Mental Health Trainings like WCT are successful in achieving long-term behavior change
Multidisciplinary Approach to Enhancing Safety and Care for Pediatric Behavioral Health Patients in Acute Medical Settings	Gary Lelonek Douglas Crook Maura Tully Kristen Trufelli Lindsay Blitz Steven Rogers	The article describes multidisciplinary initiatives from 3 academic health centers to improve how behavioral health patients are managed in acute pediatric settings	Quality Improvement	V	**C**	**3 Hospital QI Initiatives/Processes Outlined** • Boston Children's Hospital • Connecticut Children's Hospital • Cohen Children's Medical Center		**Boston Children's:** • Behavioral Response Team (BRT) • BRT is 24/7 Coverage • Consists of nursing and mental health counselor • Create treatment plans for planned admissions • Provide emergency and crisis support to inpatient units **Connecticut Children's:** • Establishment of a behavioral

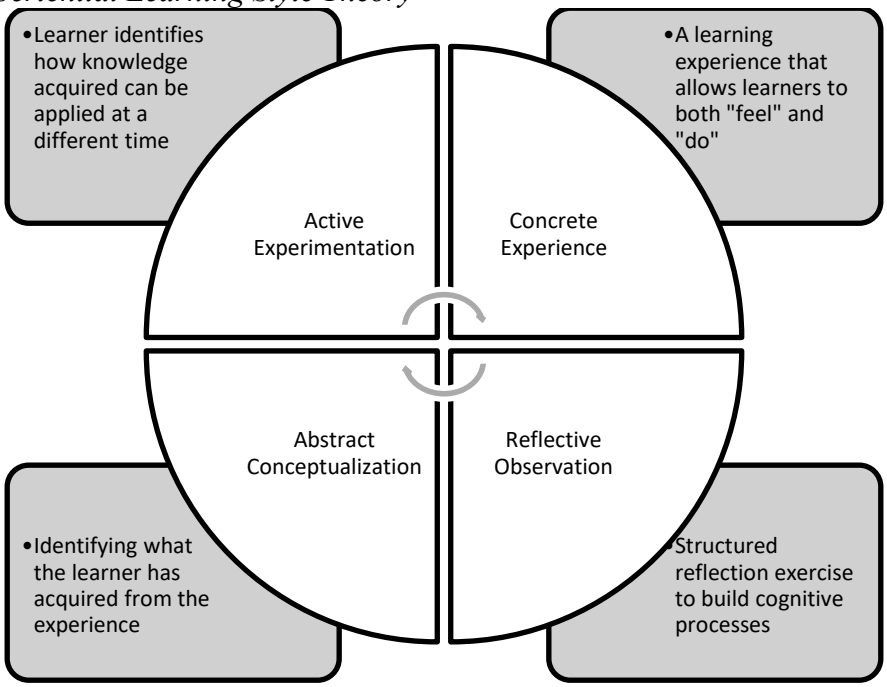
								health security division • Members train through curriculum on recognizing early signs on agitation and verbal de-escalation techniques • Training focuses on developmentally appropriate interventions to diffuse situations • Program also provides training for safe and age-appropriate means for physical restraint • Education protocols and training are now developed to

								support this work **Cohen Children's:** • Child life specialists and behavioral health in the emergency department ○ Use of developmentally appropriate dissemination of information ○ Encouragement of questions • Dialectical Behavior Therapy Skills in the Management of Behavioral Health Emergencies ○ 5-modules of skills- mindfulness, distress tolerance,

								emotion regulation, interpersonal effectiveness, and middle path • Agitation Management Simulation ○ 2 clinical scenarios to practice verbal de-escalation and use of restraints

Appendix B: Theoretical Model

Figure 2:
Kolb's Experiential Learning Style Theory



**Note: Information for this figure retrieved from (Fewster-Thuente & Batteson, 2017).*

Appendix C: Memorandum of Understanding

SMemorandum of Understanding

Memorandum of Understanding

Between

Lauren Kalember, Doctor of Nursing Practice (DNP) student

Boise State University

and

[redacted]

This Memorandum of Understanding (MOU) outlines the terms and understanding between the Lauren Kalember, a DNP student at Boise State University, and [redacted] to pilot an educational intervention to registered nurses to improve their confidence in caring for pediatric mental health patients.

Background

Approximately ten percent of pediatric hospitalizations are for a primary mental or behavioral health condition (Canvara & Johnson, 2020). The increase in hospitalizations has led to these patients being cared for on units outside inpatient units; medical, surgical, and intensive care units.

[redacted] places pediatric mental health patients in the medical and surgical units when the inpatient psychiatric unit is at capacity. In early 2021 the [redacted] had a consistent census exceeding 40 patients resulting in psychiatric patients being cared for on the general medical unit. At one point during the winter, the general medical unit had 31 pediatric mental health patients. During this time, nurse's reported feeling helpless, incompetent, and afraid to provide care for patients that required a skill set outside of pediatric medicine.

With the pediatric mental health population continuing to grow, meeting these patients' needs is a priority. Not improving the confidence and competence of nursing caring for pediatric mental health patients on the inpatient unit may ultimately increase LOS, increased cost, increased risk for patient safety events, and decreased staff satisfaction.

Purpose

This DNP pilot project aims to identify and implement an education program the includes standardized patient (SP) simulation to improve the confidence of nurses caring for pediatric mental health patients in the inpatient medical unit. The student will design and develop a 4-hour

education offering that nurses on [redacted] can volunteer to take. The course will consist of Pediatric Mental Health didactic content and SP simulations.

Intended Project Outcomes

- Support organizational strategic goal to increase pediatric mental health care
- Improve nursing knowledge of pediatric mental health care
- Improve nursing confidence of pediatric mental health care
- Reduce call volumes for [redacted] resource nurse
- Increase documentation of psycho-social goals in patient care planning

Duration

The duration of the DNP project will occur from February 2022 until May 2023; specifically, project implementation will occur between May 2022-August 2022.

Reporting

The DNP Scholarly Project will include a final report, an abstract, an oral presentation of the report and potential publication by May 2023. The DNP student will submit a Final Project Report for publication in ScholarWorks. ScholarWorks is a collection of services designed to capture and showcase all scholarly output by the Boise State University community, including doctoral dissertations and doctoral project reports.

No personal identifiers will be included and all data will be reported in aggregate form. The author welcomes any comments or suggestions from [redacted] but reserves the right to publish findings and analysis according to professional standards and principles of academic freedom. For any work of a scholarly nature, the author agrees to follow the organization(s) preferences in how it is to be named (or not) in the work.

Agency preferences for how they are named/referred to within the student's work:

The organization will be referred to as:

- [redacted]
- [redacted]
- Large Academic Pediatric Health System

Preferences on how the organization will be referred to in the student's work will occur in the: Abstract, final report, professional presentations, and professional publications.

Student Contact Information

Lauren Kalember Date:

(*DNP Student signature*)

Lauren Kalember, Boise State University DNP student

[redacted] Date: 02/02/2022

(*Organizational Contact signature*)

[redacted]

Appendix D: Logic Model

Resources/Inputs	Activities	Outputs		Outcomes: Short term	Outcomes: Intermediate	Outcomes: Long term
<u>Expenses:</u> **People** • Clinical RN • Unit-Based Educator • Unit CNS • Standardized Patient Actors • LMS site administrator **Education** • Cornerstone/learning management system **Operational** • Microsoft word • Computers • Projector/AV • Facilities-simulation space • Paper • Printer • Laminator/Sheets **<u>Support:</u>** **People**	• Complete learning needs assessment • Complete literature review of education best practices • Identify educational theoretical framework • Develop process for class registration • Design and develop education and simulation • Write lesson plan • Write facilitation guide • Partner with key stakeholders to manage class enrollment • Create educational outcomes and evaluation	• Pediatric Mental Health Education program for inpatient nursing • 6-Sessions • Learning Objects and Event in LMS • Pediatric Mental Health Simulation as approve Continuing Education Leave	• Clinical RN in the medical unit	**1.** PO: By August 2022, 30% of nurses on the pediatric medical units will have participated in pediatric mental health standardized patient simulations	**6.** PO: By December 2024, 50% of all inpatient nurses will have participated in pediatric mental health standardized patient simulations.	**11.** By 2025, nursing skills mix allows for pediatric psychiatric patients to be admitted to any unit in the organization.

• Unit clinical practice manager (CPM) • Unit Director • NPD Director **Education** • University of Washington Learning **Operational** • CNE Program **Financial** • Unit education budget	• Create and gain approval for CE application • Communicate and market class availability • Obtain IRB Approval					

Expenses: **People** • Clinical RN • LMS site administrator **Education** • Cornerstone/learning management system **Operational** • Computer • Microsoft Excel **Support:** **Education** • Reliable MH test **Financial** • Unit education budget • WSNA education leave budget	• Identify valid and reliable knowledge assessment tool for public use • Translate knowledge assessment tool to LMS as test • Include test administration in lesson planning • Review test scores after each class • Make adjustments to lesson plan and facilitation guide as needed based on gaps in knowledge assessment	• Summative Evaluation: Pediatric mental health knowledge test • Formative evaluation throughout implementation to change education as needed • Descriptive statistics for cognitive knowledge	• Clinical RN in the Medical Unit	**2.** PO: By August 2022, 70% of participants score ≥80% on a post-education summative knowledge assessment.	**7.** PO: By December 2022, 60% of pilot participants score ≥70% on summative knowledge assessment post-SP Simulation (Checking for knowledge retention)	**12.** By 2025 the organization is recognized in the pediatric community as one that provides excellent psychiatric care.
Expenses: **People** • Clinical RN • Nursing Data Analyst-Tableau **Operational** • Computer	• Identify valid and reliable confidence measurement tool • Up load confidence measurement tool into RedCap • Administer confidence assessment 2-	• Electronic confidence survey • Pre and post confidence survey scores • Descriptive statistics for confidence	• Clinical RN in the Medical Unit (River 4 and Forest 3)	**3.** By August 2022, 70% of participants report a 20% increase in confidence in providing	**8.** CO: By December 2023, 15% decrease in patient and family complaints	**13.** By 2025, there will be no organization pediatric mental health patient diverts as a result

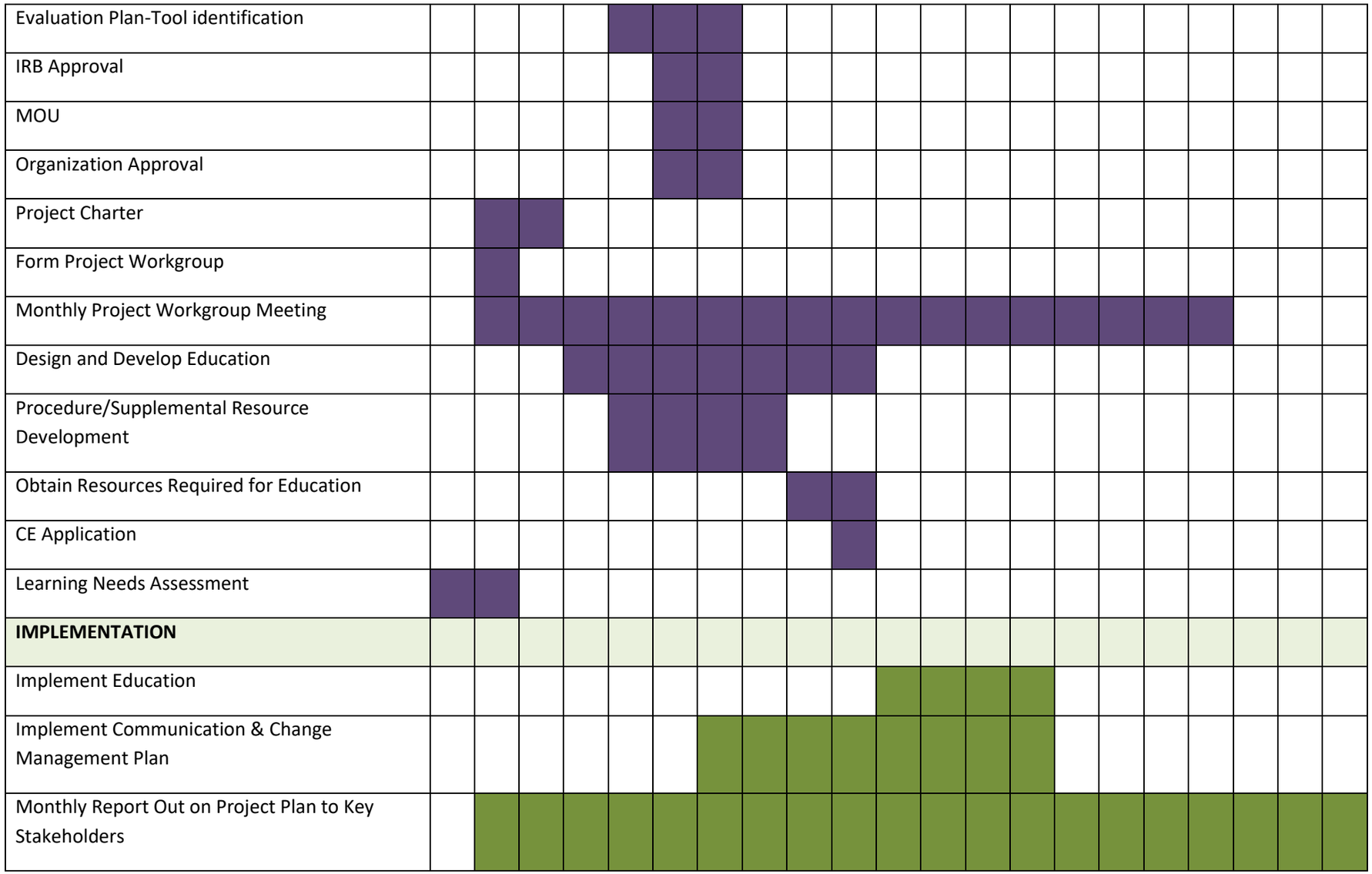
• Microsoft Forms • Microsoft Excel • Microsoft Outlook • Tableau Software <u>Support:</u> **Educational** • Reliable/Valid confidence survey **Financial** • Unit education budget • WSNA education leave budget	weeks pre-education • Administer confidence assessment post-education			therapeutic communication, risk assessments, and psychiatric assessments for pediatric mental health patients using a self-efficacy survey.	directly related to nurses' care for patients with mental health disorders (ICD 10 codes: F40-F48, F80-F89, F30-F39, F20-F29, F90-F98, F10-F19, F01-F09)	of nursing skills mix

Expenses: **Operational** • Computer • Microsoft Excel **Support:** **People** • Clinical RN • PBMU Resource RN • PBMU CNS **Educational** • N/A **Operational** • PBMU Resource RN communication collection tool for support calls • Standard work **Financial** • Unit budget	• Implement pediatric mental health SP Simulations • Identify process for documenting call volumes and requests • Collect pre-education PBMU RN communication data • Collect post-education PBMU RN communication data • Enter pre and post data into Microsoft excel • Create standard work process for PBMU Call volume documentation	• Call volumes log of resource request for PBMU support • Descriptive statistics for any change in call volumes	• PBMU Resource RN • Clinical RN in the Medical Unit (River 4 and Forest 3) • PBMU CNS	**4.** CO: By August 2022, the Psychiatric and Behavioral Health Unit (PBMU) Resource RN team reports a 5% decrease in call volumes/week for medical unit support.	**9.** CO: By December 2023 code purple rates on the medical unit will decrease by 20%.	

Expenses: **People** • Chart Auditor **Operational** • Computer **Support:** People • Clinical RN • Unit CNS **Educational** • N/A **Operational** • Chart audit job-aid/resource/standard work • EPIC	• Implement pediatric mental health education program/simulation • Complete pre-education chart audits to capture current state mental health care plan documentation • Complete post-education chart audits to capture mental health care plan documentation rates • Enter pre and post data into Microsoft excel • Partner with CNS to develop chart audit process • Create standard work for chart audit process • Identify and train team of auditors	• Chart Audit Process • Pre and post chart audit completion rates • Descriptive statistics for chart audit	• Clinical RN in the Medical Unit • CNS • Nurse Auditors	**5.** CO: By August 2022, 30% of medical unit patients have documented mental health intervention specific to their mental health needs in EMR care plan each shift.	**10.** CO: By August 2024, 60% of all patients admitted have documented mental health intervention specific to their mental health needs in EMR care plan each shift.	

Appendix E: Project Timeline

Project: Improving Nurse Confidence in Caring for Pediatric Mental Health Patients Admitted to a Large Urban Children's Hospital in the Pacific Northwest Medical Unit: A Pilot Study																					
	Month/Year																				
Activity	Jul/ 21	Aug/ 21	Sep/ 21	Oct/ 21	Nov/ 21	Dec/ 21	Jan/ 22	Feb/ 22	Mar / 22	Apr/ 22	May / 22	Jun/ 22	Jul/ 22	Aug/ 22	Sep/ 22	Oct/ 22	Nov/ 22	Dec/ 22	Jan/ 23	Feb/ 23	Mar / 23
PLANNING																					
Problem Definition- Complete December 2020																					
Searchable Question- Complete January 2021																					
Literature Review-Complete March 2021																					
Intervention Identification- Complete May 2021																					
Logic Model Development (Outcomes, Outputs, activities, resources)																					
Project Timeline Planning																					
Stakeholder Mapping																					
Project Budget Development/ROI Calculation																					
Change Management Plan Development																					
Communication Plan																					


Evaluation Plan-Tool identification
IRB Approval
MOU
Organization Approval
Project Charter
Form Project Workgroup
Monthly Project Workgroup Meeting
Design and Develop Education
Procedure/Supplemental Resource Development
Obtain Resources Required for Education
CE Application
Learning Needs Assessment
IMPLEMENTATION
Implement Education
Implement Communication & Change Management Plan
Monthly Report Out on Project Plan to Key Stakeholders

DATA COLLECTION																					
Pre-Intervention Data Collection																					
Reaction & Learning Data Collection (During intervention phase)																					
Behavior Data Collection (4-weeks after intervention)																					
DATA ANALYSIS																					
Descriptive Statistics																					
Methods and Results Writing																					
DISSEMINATION																					
Final Project Report																					
Organization Presentation																					
DNP Presentation																					
Final Report																					

Appendix F: Outcomes Evaluation

Outcome	Data Collection Instrument/Data	Analysis Goal	Analytic Technique
By August 2022, 30% of nurses on the pediatric medical units will have participated in pediatric mental health standardized patient simulations	**Instrument**: Learning Management System (LMS) Roster • Cornerstone Learning Management System *In-Person Learning Training (ILT)* package offers events and sessions to manage educational rosters. • Each event and session has an associated roster • The roster provides attendance and education completion tracking **Data**: Primary Data **Clinical RN completion** of SP Simulation events: • Participant Name • Employee ID • Employee Unit • Employee Manager • Employee Attendance Status • Pass/Fail	To track clinical RN completion of SP simulation by unit; quantifying the number of medical unit participants.	**Quantitative Statistics:** • *Frequency Distribution:* Response Rate • *Cumulative Percentage:* percent of medical unit that has attended SP simulations

By August 2022, the average score of participants is ≥80% on a post-education summative knowledge assessment.	**Instrument**: Pediatric Mental Health Knowledge Assessment.
	
	• DNP student developed knowledge assessment tool
	  ○ Tool will lack reliability and validity
	  ○ Mitigation of tool development bias includes
	  ▪ Psychiatric Nurse Researcher review
	• Questions will be developed using the didactic and SP simulation course objectives
	• Course objectives will align with the *ANA Scope and Standards of Practice for Psychiatric-Mental Health Nursing*. Specifically, Standards; 7, 8, & 11
	  ○ The Pediatric-Mental Health Nurse integrates ethical provisions in all areas of practice
		Measure the change in pre and post knowledge assessment scores
		
		Determine if there is any statistical significance in the change in pre and post scores
			Quantitative Statistics:
			
			• *Cumulative Percentage:* cumulative test scores
			• *Percent Distribution:* percent of participants that receives an 80% or greater overall test score
			• *Mean:* average total pre and post test scores

	○ The Pediatric-Mental Health Nurse attains knowledge and competence that reflects current nursing practice ○ The Pediatric-Mental Health Nurse communicates effectively in a variety of practice formats • 20-multiple choice, select all that apply, and True/False questions • Levels of learning assessed: ○ Application ○ Comprehension • Administered through Cornerstone LMS **<u>Data</u>**: Primary Data **Comprehension and Application Level Cognitive Knowledge** will be collected and measured. Data will be collected in the form of correct and incorrect answers. **Psychiatric Nursing Concept Gaps** will be identified through relation of test question to pediatric mental health nursing standards.		• *Standard Deviation (SD)*
By August 2022, the average score of participant self-efficacy improves by 20% for pediatric mental health patients using a self-efficacy survey.	**<u>Instrument</u>**: Pediatric Mental Health Self-Efficacy Assessment for Non-Psychiatric Nurses • Participant Demographic Data: ○ Unique Identifier (Free Text) ○ Age (Drop Down) ○ Years of nursing experience (Drop Down) ○ Previous Psychiatric Nursing Experience (Yes/No) ▪ If yes, years of Psychiatric Nursing Experience (Drop Down) ○ Previous Psychiatric Simulation Experience (Yes/No) ○ Previous SP Simulation Experience (Yes/No) • DNP student developed self-efficacy assessment	Measure the change in pre and post self-efficacy scores Determine if there is any statistical significance in the change in pre and post scores	**Quantitative Statistics** • *Percent Distribution:* percent of participants that reports a 20% or greater increase in confidence • *Mean:* average total pre and post confidence survey scores

	○ Tool will lack reliability and validity ○ *Bandura's Guide for Constructing Self-Efficacy Scales* is the framework for tool development • Survey questions will align with the objectives and outcomes of the course • Course objectives will align with the *ANA Scope and Standards of Practice for Psychiatric-Mental Health Nursing*. Specifically, Standards; 7, 8, & 11 ○ The Pediatric-Mental Health Nurse integrates ethical provisions in all areas of practice. ○ The Pediatric-Mental Health Nurse attains knowledge and competence that reflects current nursing practice ○ The Pediatric-Mental Health Nurse communicates effectively in a variety of practice formats • 20 questions • Survey questions will measure a self-reported degree of confidence on a scale of 0-100 using increments of 10 ○ 0→Nurse reports they "cannot do at all" ○ 50→ Nurse reports they "moderately can do" ○ 100→ Nurse reports they "highly certain can do" • Administered through RedCap **Data**: Primary Data **Demographic Data** will be collected and used to determine relationships between demographics and knowledge as well as demographics and self-efficacy. **Non-Psychiatric Nursing Psychiatric Nurse Efficacy** overall confidence scores and confidence per *ANA Scope and Standards of Practice for Psychiatric-Mental Health Nursing standard.*		• *Range*
By August 2022, the Psychiatric and Behavioral Health Unit (PBMU) Resource RN team reports a 5% decrease in call volumes for medical unit support.	**Instrument**: PBMU Call Log • Tracking log for PBMU nurse to document resource request ○ Date ○ Time ○ Unit Requesting ○ Reason Requesting	Quantify call volumes requesting additional support to the PBMU resource nurse. Pre and post data will be compared.	**Quantitative Statistics** • *Mean:* Mean calls per week. Will use mean to compare pre and post call volumes to understand % change

	Data: Secondary Data **Call volume data** will be collected and represented in total number of calls from the medical unit to the PBMU resource nurse weekly **Frequency and time data** will be collected to review requests and time of requests.		• *Standard Deviation (SD*

By August 2022, 30% of medical patients have documented mental health intervention specific to their mental health needs in EMR care plan each shift.	**Instrument**: Epic Care Plan Documentation
	
	• Chart Audit to review nurse EPIC psycho-social documentation
	  ○ Psycho-social care plan goal identification and documentation
	  ○ Pyscho-social intervention identification and documentation
	• Documented as Complete or Incomplete
	
	Data: Secondary Data
	
	Psycho-Social goals will be collected as total number of documentations by total number of patients
	
	Psycho-Social interventions will be collected as total number of documentations by total number of patients
		Quantify percentage of patients that have complete and partial complete psycho-social goals and interventions	**Quantitative Statistics**
			
			• *Percent Distribution:* percentage of patients that have complete (100%) documentation and partial (50%) documentation
			• *Standard Deviation (SD*

Appendix G: Year 1 Expense Report

					Grand Total	**$ 46,369.97**
Expense Category	**Expense Description**	**Explanation of Expense**	**Type of Cost (variable/fixed)**	**Volume**	**Cost per Unit**	**Total**
Personnel	Clinical RN Wages	Medical nurse participant in simulation/education	Variable	4 hrs X 24 RNs=120 hrs	$50/hr	$ 4,800.00
Personnel	Unit-Based Educator and Unit-Based CNS Wages	Nurse educator or CNS facilitating education and simulation. Includes 2-hours or course prep/setup/takedown and 4-hours of teaching.	Variable	6 hrs x (2 facilitators x 6 sessions) = 72hrs	$52/hr	$ 3,600.00
Personnel	Standardized Patient Actor Wages	Standardized patient actors from local university and standardized patient program. 2-hours of acting as patients in simulation	Variable	2 hrs x (6 actors x 6 sessions) =72 hrs	$20/hr	$ 1,440.00
Personnel	DNP Project Management	DNP Project Manager hourly wages for project management and DNP Project Manager course development at 8-hours per 1-hour of course development per industry standards	Variable	500 hrs + (8hrs x 4 hr class) = 532 hrs	$58/hr	$ 30,856.00
Personnel	Learning Management Systems (LMS) Administration Support Wages	Build events/sessions in LMS and manage rosters. 2-hrs upfront build and 0.5 hrs/session	Variable	2 hrs + (0.5hrs x 6 sessions) = 3 hrs	$32/hr	$ 96.00
Personnel	Nursing Data Analyst	One-time data pull for pre and post tableau data of patient/family complaints and Code Purple Rates	Variable	2 hrs	$48/hr	$ 96.00
Personnel	Nursing Quality Leader/Auditor	Monthly manual chart review to ensure mental health intervention documented under care plan	Variable	4 hrs x 12 months= 48hrs	$52/hr	$ 2,496.00

Materials & Supplies	Thermal Lamination Sheets	Lamination sheets for SP actor scripts, facilitator guides, debriefing tools	Fixed	1 pack	$30.00	$ 30.00
Materials & Supplies	Toner	Black and color toner for scripts, signage, debriefing tool, facilitator guides	Fixes	2 cartridges	$9.00	$ 18.00
Materials & Supplies	Paper Ream	Paper for scripts, signage, debriefing tool, facilitator guides	Fixed	1 ream	$8.00	$ 8.00
Equipment	Participant Computers	Computers for participants to complete pre-confidence and pre-knowledge assessments during class. Free amenity with conference center rental.	Fixed	6 computers	$0	$ -
Equipment	Project Planner Computer	Computer for project planner to store data, run descriptive statistics, course develop, and course facilitation	Fixed	1 computer	$549.99	$ 549.99
Equipment	Thermal Laminating Machine	Lamination for standardized patient scripts and day of facilitation guides	Fixed	1 laminator	$59.99	$ 59.99
Equipment	Projector & A/V	Projector for didactic portion of course. Free amenity with conference center rental	Fixed	Projector System	$0	$ -
Equipment	Printer	Printer for class materials and simulation scripts	Fixed	1 printer	$249.99	$ 249.99
IT	Microsoft Office Business-Standard	Use of Microsoft: Excel, Word, Outlook, PowerPoint, and Forms for descriptive statistics, data collection, education design, and resource development.	Fixed	$12.50 Membership x 12 months	$12.50/month	$ 150.00
IT	Tableau Viewer-Business Membership	Access to Tableau Software database for family complaints and code purple documentation	Fixed	$12.00 Membership x 12 months	$12/month	$ 144.00

IT	Cornerstone LMS Access	LMS purchased by organization used to manage events/sessions	Fixed	$8.00 Membership x 12 months	$8/month	$ 96.00
Space	Conference Room & 6 Breakout Rooms	Sandpoint Learning Center Conference Room Rental	Variable	4hrs x6 sessions=24 hours	$70/hr	$ 1,680.00

Appendix H: 3-Year Budget Plan

Yearly Totals:	$ 46,369.97	$ 137,319.00	$ 144,055.00	
Expense Category	**Year 1**	**Year 2**	**Year 3**	**Rationale**
Personnel	$ 43,384.00	$ 118,112.00	$ 123,728.00	Pilot yr 1 with 24 medical unit RNs, expanded to include 400 inpatient RNs (25% of inpatient) yr 2, expanded to include 418 inpatient RNs (50% of inpatient complete) yr 3. Average RN Salary increased to reflect nursing union contract increases (approx 7% increase each contract). Attrition in the Nurse Educator and CNS role maintains average cost/hr. The increase in participants yearly impacts the total number of sessions required impacting nurse facilitator hours, standardized patient actor hours, and LMS administration hours.
Materials & Supplies	$ 56.00	$ 57.00	$ 57.00	General supply costs and restock annually. Average inflation rate of 2% calculated.
Equipment	$ 859.97	$ -	$ -	Initial set-up costs of equipment (Printer, laminator, computer) not required yearly.
IT	$ 390.00	$ 390.00	$ 390.00	Maintenance costs for IT memberships
Space	$ 1,680.00	$ 18,760.00	$ 19,880.00	Increase sessions from 14 (yr 1), 67 (yr 2), 70 (yr 3) to accommodate the increase in participants; resulting in increased requirement for rental space. (Goal by year 5 100% inpatient completed training) Average inflation rate of 2% calculated.

Appendix I: Statement of Operations

Operating Income		**$ -**
	Revenue Total	**$ 46,369.97**
Source	**Description**	**Amount**
This is a subsidized project with no associated revenue. In-kind contributions by the sponsoring organization and DNP student.	In-kind personnel wages: clinical RN, unit-based educator, unit-based CNS, LMS admin support, and DNP student.	$ 33,384.00
Nursing Research Grant	Personnel wages: SP actor, data analyst, nursing quality leader	$10,000.00
In-Kind Materials and Supplies	In-kind materials and supplies: toner, paper ream, and thermal lamination sheets.	$56.00
In-kind Equipment	In-kind equipment: participant computers, project planner computer, thermal laminating machine, projector, audio/visual technology, and printer.	$859.97
In-kind IT	In-kind IT: Microsoft Office Business-Standard, Tableau Viewer-business membership, and Cornerstone LMS monthly access.	$390.00
In-kind Space	In-Kind Space: Conference Room, 6 - breakout rooms	$ 1,680.00
	Expenses Total	**$ 46,369.97**
Expenses	**Description**	**Amount**
Personnel	Clinical RN, Unit-Based Educator and CNS, SP Actor, LMS Admin Support, Nursing Data Analyst, Nursing Quality Leader/Auditor, and DNP student wages.	$43,384.00
Materials & Supplies	Thermal lamination sheets, toner, & paper ream.	$56.00
Equipment	Computer, thermal laminating machine, & printer.	$859.97
IT	Microsoft Office Business Standard, Tableau Viewer Business, & Cornerstone LMS Access.	$390.00
Space	Conference Room & 6- Breakout Rooms	$ 1,680.00

Appendix J: IRB Letter of Determination

[redacted]

NOT HUMAN RESEARCH

February 23, 2022

Lauren Kalember

[redacted]

Dear Dr. Lauren Kalember:

On 2/23/2022, the IRB reviewed the following submission:

Type of Review:	Initial Study
Title of Study:	Improving Medical Nurses Confidence in Caring for Pediatric Mental Health Patients
Investigator:	Lauren Kalember
Activity ID:	STUDY00003663
IRB ID:	STUDY00003663
Funding:	None
Grant ID:	None
IND, IDE, or HDE:	None
Documents Reviewed:	• kalember.HRP-503C-new regs-PROTOCOL Other Status Determination2.22-LK Edits Afternoon.pdf, Category: IRB Protocol;

The IRB determined that the proposed activity is not research involving human subjects. IRB review and approval is not required.

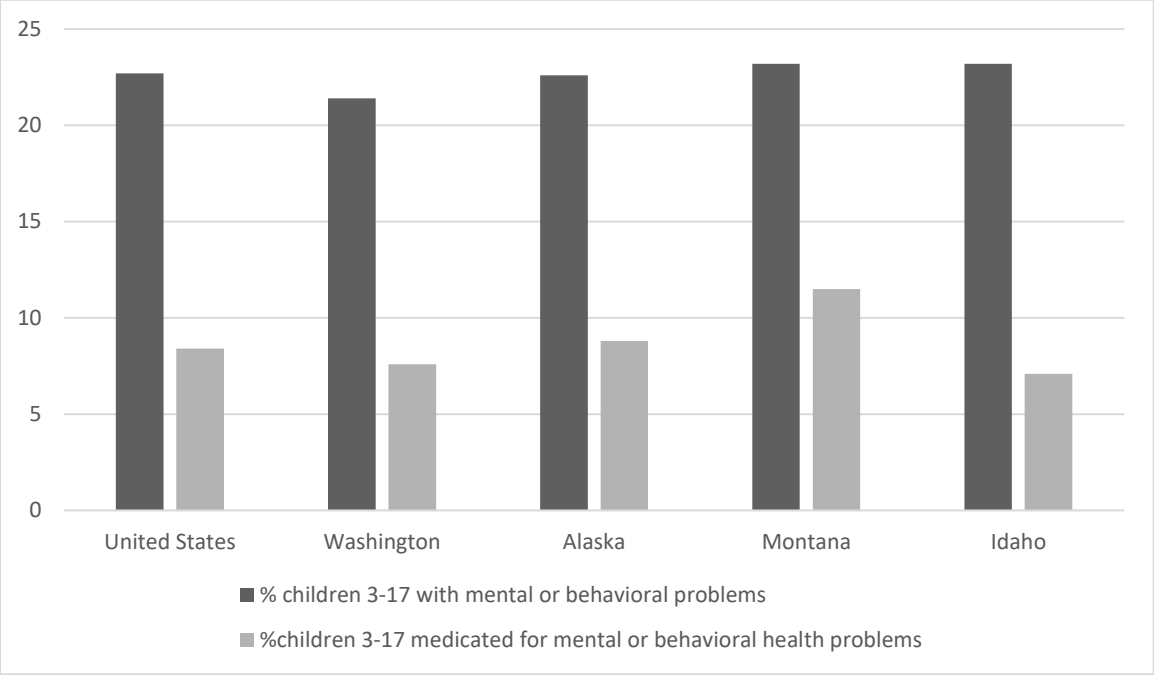
This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are being considered and there are questions about whether IRB review is needed, please submit a study modification for a determination. You can create a modification by clicking Create Modification/CR within the study workspace.

Sincerely,

[redacted], MPA, Human Subjects Protection Analyst

Appendix K: Figures and Tables

Figure 1:
WAMI Region Pediatric Mental Health Prevalence



Note: Data representing in this figure obtained from National Survey of Children's Health, Health Resources, and Services Administration, 2018

Table 1:
Synthesis of Education Needs Related to Care of Pediatric Mental Health Patients

Educational Needs
Risk Assessment- Suicidal and Homicidal Ideations
Patient Monitoring
Documentation of Mental Status and Behavior
De-Escalation
Crisis Prevention
Suicide Precautions
Mental and Behavioral Health Conditions
Mental and Behavioral Health Treatments
Pediatric Mental Health Assessment
Psychopharmacology
Milieu Therapy Principles
Therapeutic Communication

Note: Information on this table obtained from (Hazen & Prager, 2017), (Canvavera & Johnson, 2020) , (Parant, Pingitore, & LaRose, 2014), and *(Moran & Gutman, 2020).*

Figure 3:

SWOT Analysis of Large Urban Pediatric Hospital

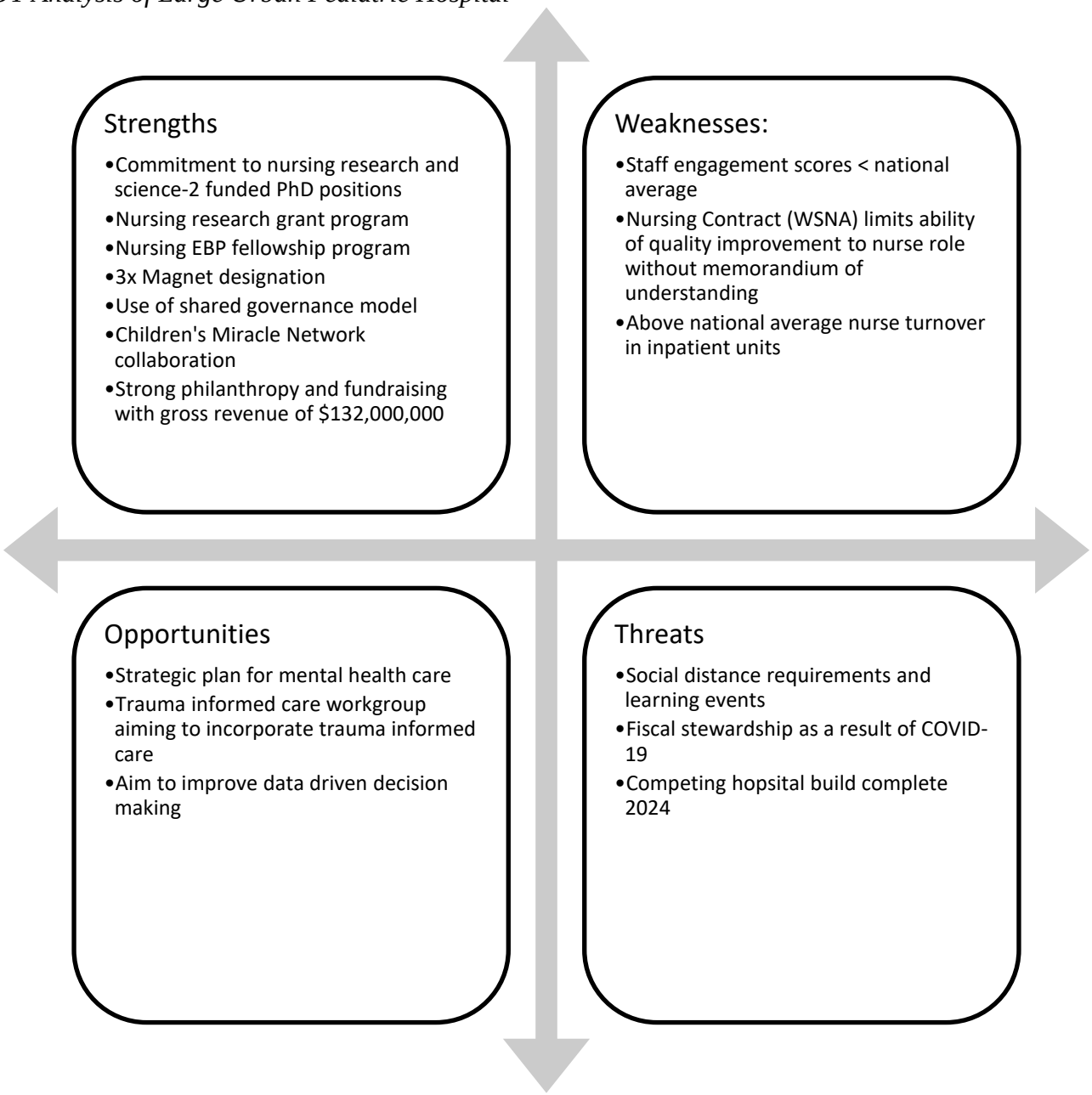


Table 2:

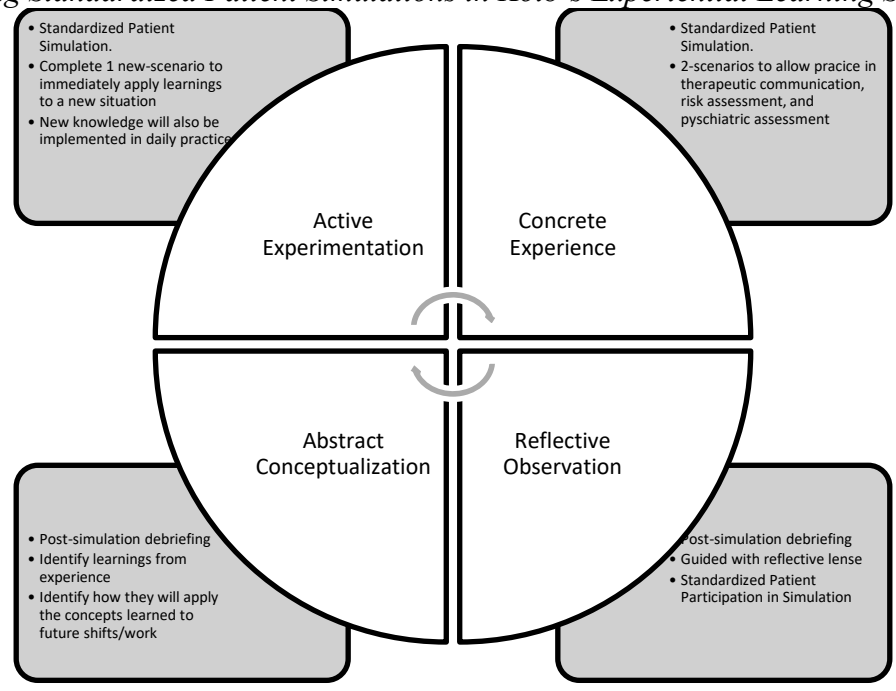
WAMI Region Race Demographics

State	White	Black	American Indian	Asian	Pacific Islander	Hispanic	Two or More
Washington	72.1%	3.5%	1.5%	9.4%	0.4%	10.8%	3.4%
Alaska	63.6%	4.5%	13.5%	5.0%	0.0%	7.3%	5.2%
Montana	88.1%	0.4%	5.1%	0.9%	0.0%	3.4%	1.9%
Idaho	84%	0.0.%	1.6%	0.7%	0.0%	10.8%	2.3%

Note: Data represented in table obtained from U.S. Census Bureau BRFSS Prevalence and Trends Data, 2019.

Figure 4:

Integrating Standardized Patient Simulations in Kolb's Experiential Learning Style Theory



**Note: Information for this figure synthesized from (Fewster-Thuente & Batteson, 2017).*

Appendix L: Educational Recruitment Flyer

INTRO TO PEDIATRIC MENTAL HEALTH CARE FOR NURSES

This 4-hour IN PERSON class includes:

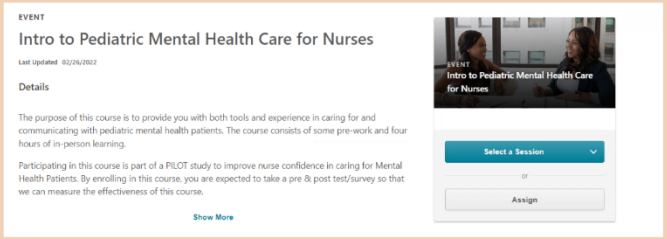
- Lecture
- Group Activities
- Simulation

4-HRS CE: PENDING APPROVAL

DATES:

6/8/22: 8a-12p
6/27/22: 1p-5p
6/29/22: 1p-5p
7/6/22: 1p-5p
7/7/22: 1p-5p
7/29/22: 8a-12p

SCAN THE QR CODE TO SIGN UP IN GROW@SC



*note this is a DNP Pilot Project to understand the effectiveness of this education on knowledge and confidence

Appendix M: Lesson Plan

Time	Topic	Learning Objectives	Activities	Slide #
35 minutes	Welcome, Introduction, and Safety Contract	• Allow time for Pre-work • Review course objectives • Learn about peer group • Agree on course safety norms	• Pre-Work QR Code • Ice-Breaker • Story Sharing • Group Development	1-5
7 minutes	High-Level Review of the Pediatric Mental Health Crisis	• Discuss increase in pediatric mental health needs • Review pediatric mental health need demand and supply	• Didactic Lecture	6-7
20 minutes	Introduction to Trauma Informed Care	• Define principles of trauma informed care • Analyze how the principles appear in patient care • Review commonly encountered scenarios	• Didactic Lecture • TIC Video • Discussion Prompt	8-11
10 minutes	Behavioral Responses to Trauma	• Discuss trauma experiences in the health care setting • Match trauma responses to behavioral, emotional, or psychological categories	• Discussion Prompts • Didactic Lecture • Match Game	12-19
7 minutes	Recognizing Trauma	• Apply trauma identification concepts to a real-life scenario	• Group Case Study • Multiple Choice Prompts	20-29
5 minutes	Break			
2 minutes	Introduction to Crisis and Escalation	• Review principles of crisis and escalation	• Calming & De-Escalation Strategies Video	31-32
10 minutes	Risk Factors and Warning Signs of Crisis and Escalation	• Discuss risk factors for crisis and escalation • Review warning signs of escalation	• Didactic lecture • Discussion Prompts	33-35
20 minutes	Strategies to Navigate Crisis and Escalation	• Watch strategies for de-escalation • Teach the three-steps to de-escalation • Review environmental changes to support de-escalation	• Calming & De-Escalation Strategies Video • Teach-Back activity • Didactic Lecture • Discussion Prompt	36-42

5 minutes	Break			
10 minutes	Introduction to SP Simulation	• Introduce SP actors • Pre-brief	• Group discussion	N/A
5 minutes	Simulation Participant Prep	• Prep time for simulation participant	• Review simulation tools and resources	N/A
12 minutes	SP Simulation Scenario #1	• Practice caring for a mental health patient	• Simulation	N/A
25 minutes	Scenario #1 debrief	• Discuss simulation experience • Identify comfort areas • Identify areas of improvement • Explain what learnings you will apply to the next scenario	• Group debrief	N/A
5 minutes	Break			
5 minutes	Simulation #2 Pre-brief	• Pre-brief	• Group discussion	N/A
5 minutes	Simulation Participant Prep	• Prep time for simulation participant	• Review simulation tools and resources	N/A
12 minutes	SP Simulation Scenario #2	• Practice caring for a mental health patient	• Simulation	N/A
25 minutes	Scenario #2 debrief	• Discuss simulation experience • Identify comfort areas • Identify areas of improvement • Explain what learnings you will apply to practice	• Group debrief	N/A
5 minutes	Closing and next steps	• Post-test and survey expectations • CE-Survey • Resources for future learning	• Discussion	46-47

Appendix N: Pre-Brief Checklist

Introduction to Pediatric Mental Health Communication and Simulation Pre-Brief Checklist and Script

Date:_____

Facilitators: _____
_____
_____

Simulation Case: Eating Disorder / Suicidal Ideation (Circle One)		
Element	**Complete**	**Additional Comments**
Psychological Safety	Yes ☐ / No☐	
Fiction Contract	Yes ☐ / No☐	
Confidentiality	Yes ☐ / No☐	
Communication	Yes ☐ / No☐	
Logistics	Yes ☐ / No☐	
Facilitator Expectations	Yes ☐ / No☐	
Describe Backstory	Yes ☐ / No☐	
Participant Roles	Yes ☐ / No☐	
Simulation Objectives	Yes ☐ / No☐	
Simulation Evaluation	Yes ☐ / No☐	
Room Orientation	Yes ☐ / No☐	
Preparation Time	Yes ☐ / No☐	

**Note: Information from this table synthesized from Rutherford-Hemming, Lioce, & Breymier, 2019*

Simulation Case: Eating Disorder / Suicidal Ideation **(Circle One)**	
Psychological Safety:	Welcome to the simulation portion of this course. As you can see, we have had some folks join us. Let's take a moment and do brief introductions before we get started. Thank you all for taking a minute to introduce yourselves! I wanted to start this simulation recognizing that the topics/materials are sensitive and often challenging for participants. To best support one another and create a safe learning environment I ask: 1. We engage in active listening 2. Develop an open mindset 3. Ask questions and/or for help 4. Be honest 5. Embrace mistakes and learn
Fiction Contract:	This is a simulated learning environment. The setting, patients, and props may not exactly mimic real life. I ask that you "Suspend Disbelief" and immerse yourself with-in the simulation.
Confidentiality:	I ask that everything that occurs during this simulation stays in this space and remains confidential to protect the individuals involved. This includes the learners, actors, participants, and facilitators.
Communication:	Again, I ask that you communicate your needs, ask questions, and be open to giving/receiving feedback.
Logistics:	In a moment we are going to prepare you for the specific simulation. The group will break off into groups of two nurses. Each pair will enter a simulation room. There will be 10-minutes for the simulation we will follow up with a 20-30 minute debrief.
Facilitator Expectations:	I ask that you participate in the simulation as you would during your normal shift. The simulation objectives will outline your expectations as a clinical nurse for the scenario. These objectives are also outlined on your "nursing station" in the "patient room". You may refer to them at any time during your simulation. Any supplies or resources you may need are available in the room. We will review these in a moment.

<table>
<tr><td rowspan="2">Describe Backstory:</td><td>Eating Disorder</td><td>Suicidal Ideation</td></tr>
<tr><td>Shay is a 17-year old that was referred to the emergency department for an inpatient admission by their primary care provider.
At their primary care appointment, it was discovered that Shay has been calorie restricting (600-800 kCal/day), exercising excessively, and had a significant rapid weight loss.
Shay was admitted to River 4 from the emergency department to start the ED re-feeding protocol and for monitoring. This is Shay's 4th day of admission.</td><td>Koda is a 16-year-old that was admitted to River 4 from the Emergency
In the emergency department Koda changed into maroon scrubs and completed a person's search
Department for Suicidal Ideation and anxiety
Koda is awaiting a PBMU admission
This is Koda's first few minutes in the unit</td></tr>
<tr><td>Participant Roles:</td><td colspan="2">Facilitator:
Will monitor time and simulation objectives
Will provide objective feedback during the structured debrief
SP Actor:
Patient
Caregiver
Both will provide objective feedback on actions and behavior and subjective feedback on impact of said actions/behaviors
They will react to the clinical RNs interventions
Clinical RN:
Will be the primary RN for the simulation
Observer RN:
Will provide feedback on the scenario
Can act as a resource RN should the Clinical RN require support</td></tr>
</table>

<table>
<tr><td>Simulation Objectives:</td><td>Eating Disorder</td><td>Suicidal Ideation</td></tr>
<tr><td></td><td>For this case you will:
Perform a focused noon assessment
Heart/Lung Sounds
Perfusion
Mental Status
Offer the bathroom to Shay prior to lunch
Deliver Meal Tray
Remove meal slip
Establish boundaries with eating – 100% completion & 30 minutes
Review next steps with patient
Assess % meal eaten and follow Eating Disorder GOC when meal is not eaten
Identify need for boost
Discuss next steps when boost is not consumed → includes placement of the NG
Validate the patient & caregiver experience
Respond therapeutically to patient and caregiver
Set clear and honest boundaries</td><td>For this case you will:
Provide Patient Support Handout with caregiver and family
Complete Patient Watch Education
Complete an environmental and belongings search
Include patient AND caregiver belongings
Complete a Focused Admission Assessment
Substance History
Gender Identity/Sexuality
Safety/Coping
Home/Family
Education
Suicide Risk
Validate the patient & caregiver experience
Respond therapeutically to patient and caregiver
Set clear and honest boundaries</td></tr>
<tr><td>Simulation Evaluation:</td><td colspan="2">The facilitators will be using a facilitator check-list that includes:
Learning objectives as well as actions and objectives that align with therapeutic communication best practices.

The SP actors will also be using a tool with prompted questions to promote the debrief experience.</td></tr>
<tr><td>Room Orientation:</td><td colspan="2">Let’s take a look at the room and review the equipment, supplies, and props.</td></tr>
<tr><td>Preparation Time:</td><td colspan="2">You will have 5-minutes to acclimate to the room prior to the start of simulation.

Might I suggest reviewing:
Objectives & Nurse Actions
Tools & Resources
The Patient’s Past Medical History and Social History
If you are ready prior to the end of 5-minutes, please let your facilitator know and we will begin the simulation.
Upon completion of the simulation, we will meet back in the main classroom for a structured de-brief.</td></tr>
</table>

Appendix O: Introduction to Pediatric Mental Health Communication and Simulation: PEARLS Debrief

Date:_____

Facilitators: _____

Simulation Case: Eating Disorder / Suicidal Ideation (Circle One)			
Objective	**Task**	**Script/Prompt Questions**	**Comments**
1. Create a safe environment for learning	• Review the purpose of debrief	• I want to acknowledge that this scenario is hard and can cause an emotional response for those participating. Please prioritize taking care of yourself. Take a break or leave the room at any time if needed. • The purpose of this debriefing is to explore feelings, reactions, and events that occurred for this simulation. We will review the objectives, discuss learnings, and determine how to apply those learnings to practice.	
2. Explore feelings and reactions	• Prompt for initial feelings or reactions from the clinical RN and the SP actor	• Let's start with the patient's nurse. How did that scenario feel? • As the patient/caregiver what were your feelings throughout the scenario?	
3. Describe the event using objective facts	• Elicit the group in providing a summary of the case.	• Let's walk through the main points of the scenario. (Use Simulation Worksheet) • Stop after each point to have people describe what their actions were	
4. Analyze the event	• Have learners assess their own performance • Ask clarifying questions • Use Advocacy/Inquiry	• "I noticed" Statements • When the patient said "X" how did you respond or change your response? • When the nurse did "X" why did your behavior as a patient/caregiver change	
5. Application/Summary and key-takeaways	• Learner centered approach for how to apply concepts from simulation to practice	• Let's identify 2 or three things you learned • How will you apply those learnings in the future?	

**Note: Information from this table synthesized from Bajaj et al., 2018*

Appendix P: Permission to Use SP Case Template

[redacted]

From: [redacted]
Sent: Tuesday, April 12, 2022 10:40 AM
To: [redacted]
Subject: RE: Case Development Template

Hi Lauren,

Thank you for asking, and yes that is fine. While it's ASPE's intellectual property, it is there for you to use as you see fit.

Best,

[redacted]

ASPE
The Global Network for Human Simulation Education

Mark Your Calendars
2022 ASPE Annual Conference
June 26-29, 2022
Hilton New Orleans Riverside
New Orleans, Louisiana, USA

From: [redacted]
Sent: Tuesday, April 12, 2022 1:24 PM
To: [redacted]
Subject: Case Development Template

Hello,

I am completing a DNP project using standardized simulation as a modality to improve non-psychiatric nurse confidence in caring for psychiatric patients.

I was hoping that I could have permission to use your Case Development Template write my simulations? Additionally, if it is okay to use, would it be alright for me to modify some of the headings to align with inpatient nursing standard work: ex 'Reason for Visit' changed to 'Reason for Admission'?

Thank you for considering,

Appendix Q: Eating Disorder Standardized Patient Simulation Template

Part 1 – Simulation Administrative Details and Preparation

Patient (SP) Name:

Shay

Patient's Reason for the Admission:

Eating Disorder- Refeeding and Bradycardia

Patient's Chief complaint:

Newly diagnosed eating disorder admitted from the emergency department for refeeding and monitoring.

Case Purpose or Goal:

The registered nurse will deliver a meal tray to an eating disorder patient and navigate a potential escalation – patient or parent

Level of the learner and discipline:

Registered Nurse on the Pediatric Medical Unit

Learner's prerequisite knowledge and skills:

-Complete the pre-knowledge assessment -Complete the pre-simulation self-efficacy survey -Complete the first part of course – Introduction to Pediatric Mental Health

Case authors:

Lauren Kalember Janelle Reidy Christina Galvez

Date of case development:

04/12/22

Summary of patient story:

- Shay is a 17-year old that was referred to the emergency department for an inpatient admission by their primary care provider.
- At their primary care appointment, it was discovered that Shay has been calorie restricting (600-800 kCal/day), exercising excessively, and had a significant rapid weight loss.
- Shay was admitted to River 4 from the emergency department to start the ED re-feeding protocol and for monitoring. This is Shay's 4th day of admission.

Learning/Case objectives:

- Complete a focused assessment
- Establish a collaborative relationship with the mental health patient and their caregiver
- Identify signs of patient escalation
- Acknowledge and validate patient experience
- Utilize Just in Time resources for assisting with feeding advancement
- Collaborate with caregiver to ensure patient completes meal

List of learner assessment instruments used:

- Facilitator Checklist
- Observer notes

Event format:

1. Case 1- Pre-Brief
2. SP Simulation Case 1: ED patient
3. Case 1-PEARLS Debrief
4. Case 2 Pre-Brief
5. SP Simulation Case 2: SI admission patient
6. Case 2- PEARLS Debrief

List of special supplies needed for encounter:

Shay	Parent	Clinical Nurse	Environment

• Athleisure
• Cell Phone – use SP actor personal phone
	• Cell Phone – Use SP actor personal phone	• Stethoscope
		• Report Sheet
			• Meal Tray & Slip
			  ○ Peanut Butter & Jelly
			  ○ Apple Slices
			  ○ Milk & Water
			• Binder
			  ○ kCal Plan – 2200/day
			  ○ Eating Disorders and Refeeding
			  ○ ED Refeeding Pathway
			• Boost – 11 oz
			• Straw
			• 2-tables
			• 2 chairs

Part 2 – Door Chart/Note & Learner Instruction

Setting (place/time)

- Patient's Room
- Lunch-time

Participants

- Shay – SP Actor
- Caregiver – SP Actor
- Clinical RN
- Clinical RN Resource & Observer
- Facilitator

Patient Name: Shay
Age: 17
Gender: Diverse/Neutral
Chief Complaint: Eating Disorder – Refeeding Pathway

Instructions to Learners:

- Shay is a 17-year old that was referred to the emergency department for an inpatient admission by their primary care provider.
- At their primary care appointment, it was discovered that Shay has been calorie restricting (600-800 kCal/day), exercising excessively, and had a significant rapid weight loss.
- Shay was admitted to River 4 from the emergency department to start the ED re-feeding protocol and for monitoring. This is Shay's 4th day of admission and you are the primary nurse
- Shay has had moderate compliance with the ED refeeding GOC and required NG placement 2x
- You have a resource nurse available if you have parts of the scenario, you need help remembering

For this case you will:

- Perform a focused noon assessment
  - Heart/Lung Sounds
  - Perfusion
  - Mental Status
- Offer the bathroom to Shay prior to lunch
- Deliver Meal Tray
  - Remove meal slip
  - Establish boundaries with eating – 100% completion & 30 minutes
  - Review next steps with patient
- Assess % meal eaten and follow Eating Disorder GOC when meal is not eaten
  - Identify need for boost
  - Discuss next steps when boost is not consumed → Includes placement of NG
- Respond therapeutically to patient and caregiver
- Validate patient experience
- Set clear and honest boundaries

Part 3 – Content for SPs

Cue/Action	Clinical RN	Shay	Kris/Caregiver
Noon-Focus Assessment: **Facilitator Note: Okay to read out VS if RN asks**	VS obtained by CNA • HR: 47 • BP: 102/64 • RR: 15 • Spo2: 99% on RA Complete focused assessment: • Heart/Lung Sounds • Perfusion • Mental Status Therapeutically respond to Shay & caregiver Validate both Shay & Kris's experience	Crouched over in chair looking at phone "Why do you have to do this" Allows the assessment but appear annoyed, roll eyes, be distracted	On phone leaning against wall "Can you just do this later, you already did it once this morning"
Offer bathroom	Offer Shay the opportunity to use the bathroom before the meal is delivered Set bathroom privilege boundaries for after meal	"I'm 17, no one tells me when I have to go to the bathroom" Show increased frustration If clinical RN validates feelings, reduce frustration otherwise continue slight escalation	Continue to scroll on phone "Shay can you please just chill"
Deliver Meal Tray **Facilitator Note: Okay to coach RN to set-boundary and leave the room if stuck in a loop**	Remove meal slip before patient is able to see Set boundaries for eating time limits & 100% meal completion Describe that you will not interrupt the meal for 30-minutes Review next steps if meal is not completed Leave room	"I need to see the slip; I need to know how many calories I am eating" If RN forgets to remove meal slip: start counting calories "I won't eat lunch if I don't know how many calories are in it" Shay appears anxious, is starting to get restless Action: Do not eat meal	"Can I at least see the calories if Shay can't" "It is so frustrating that I cannot care for my own child in here" Caregiver is increasingly frustrated as Shay gets more restless

Cue/Action	Clinical RN	Shay	Caregiver
Return to Room (pretend 30-minutes has passed) **Facilitator Note: This should be ½ way**	Clinical RN assesses that 0% of meal has been eaten Explain that you will take away the meal and bring back a boost. Respond to Shay and Caregiver Remove tray & use guideline of care to calculate boost needs	Shay is withdrawn, sitting at the table, playing on their phone. "I told you I wasn't going to eat if I didn't see the calories"	"Can we just have 20 more minutes? I think I can get them to eat?" Appear frustrated with crossed arms
Grab Boost and Return to Room **Facilitator Note: If RN fixates on pacing, instruct to move on. Okay to coach RN to set-boundary and leave the room if stuck in a loop**	Hand Boost to Shay Discuss 10-minute uninterrupted time limit Discuss next steps with Shay -including placement of NG tube and feeding Set clear and honest boundaries	Shay is pacing around the room "I will not drink the boost" "I just want to go home; I was doing just fine there" "Fine put a tube down my nose, I don't care" Action: Do not drink boost	Caregiver appears concerned about Shay and their pacing If the RN doesn't describe what happens if Shay doesn't drink the boost: "What happens if they don't drink the boost"
Return to Room (pretend 10-minutes has passed)	Assess amount of Boost consumed: 0% consumed Tell Shay "I am going to get NG supplies" Therapeutic communication/validate feelings and experience	Shay continues pacing "This is ridiculous, you can't make me do anything" As RN leaves the room Shay sits down and drinks a sip of boost	Caregiver remains looking concerned When Caregiver feels validation: "Shay, please take a seat and drink your boost. It is far better than having to be fed through a tube"

Past Medical History (PMH): (consider the following)

Illnesses/Injuries: None
Hospitalizations: None Prior
Surgical History: Appendectomy 10/2020
Medications (Prescription, Over the Counter, Supplements): Multivitamin Daily Greens Vitamin Fiber Capsules Miralax
Allergies (e.g. environmental, food, medication and reaction) No Known Allergies

Social History:

Substance Use (past and present) **Drug Use:** None **Tobacco Use:** None **Alcohol Use:** Drinks white claw on weekends
Home Environment: • 2-Caregiver Household • Upper-Middle Class
Social Supports: • 2-Caregiver Household • Large core-group of friends • Sports team – Track & Soccer • Older Sibling plays Collegiate Football
Occupation: • Student at private school
Leisure Activities: • Track Team • Soccer Team • Musical Theatre • Debate Team
Diet: • Calorie Restrictive- 600-800kCal/day • 1 “power smoothie” daily
Exercise • Run 5x/week • 2hrs sports 5x/week • Weight lifting weekends

Part 4 – Facilitator Checklist

Action/Observation	Complete	Comments
Perform Focused Noon Assessment	**Yes No**	
Offer Bathroom prior to Lunch	**Yes No**	
Deliver Meal Tray and set clear boundaries including 30-minutes and 100% completion	**Yes No**	
Assess % Meal Eaten & Follow Eating Disorder GOC to deliver boost	**Yes No**	
Deliver Boost set clear boundaries and articulate next steps if boost is not consumed	**Yes No**	
Establish a collaborative relationship with the mental health patient and their caregiver	**Yes No**	
Identify signs of patient escalation (If Applicable)	**Yes No**	
Acknowledge and validate patient experience	**Yes No**	
Acknowledge and validate Caregiver experience	**Yes No**	
Set clear and honest boundaries	**Yes No**	

Appendix R: Suicidal Ideation Standardized Patient Simulation Template

Part 1 – Simulation Administrative Details and Preparation

Patient (SP) Name:

Koda

Patient's Reason for the Admission:

Suicidal Ideation and Anxiety

Patient's Chief complaint:

Patient is admitted from the emergency department after they described feelings of anxiety and suicidal ideation.

Case Purpose or Goal:

The registered nurse will complete an environmental and belongings search as well as admission assessment.

Level of the learner and discipline:

Registered Nurse on the Pediatric Medical Unit

Learner's prerequisite knowledge and skills:

-Complete the pre-knowledge assessment -Complete the pre-simulation self-efficacy survey -Complete the first part of course – Introduction to Pediatric Mental Health

Case authors:

Lauren Kalember Janelle Reidy Christina Galvez

Date of case development:

04/12/22

Summary of patient story:

- Koda is a 16-year old that was admitted from the Emergency Department for Suicidal Ideation (SI) and anxiety
- Koda has missed 7/15 days of school
- The psychiatric and behavioral medicine unit (PBMU) is at capacity so Koda is admitted to the River 4 medical unit
- Koda and their caregiver are present on admission

Learning/Case objectives:

- Complete an environmental and belongings search
- Establish a collaborative relationship with the mental health patient and their caregiver
- Identify signs of patient escalation
- Acknowledge and validate patient experience
- Utilize Just in Time resources for assisting with patient/caregiver education
- Collaborate with caregiver to patient safety
- Provide patient support handout and education patient/caregiver
- Complete outlined elements of the shift assessment

List of learner assessment instruments used:

- Facilitator Checklist
- Observer notes

Event format:

7. Case 1- Pre-Brief
8. SP Simulation Case 1: ED patient
9. Case 1-PEARLS Debrief
10. Case 2 Pre-Brief
11. SP Simulation Case 2: SI admission patient
12. Case 2- PEARLS Debrief

List of special supplies needed for encounter:

Koda	Caregiver/Taylor	Clinical Nurse	Environment

• Red Scrubs
• Backpack
  ○ Book
  ○ Compass
  ○ Headphones
  ○ Tylenol/ motrin
  ○ Scarf
• Cell Phone – Use SP actor personal phone
• Answers to admission assessment
• Patient Belonging Bag
  ○ Clothes
	• Cell Phone – Use SP actor personal phone
	• Bag/Satchel
	  ○ Pill box
	  ○ Water bottle
	  ○ Yarn
	  ○ Knitting Needles
		• Stethoscope
		• Report Sheet
			• Medical Cords
			  ○ ECG Leads
			  ○ Pulse Ox Probe
			• Scissors
			• Binder
			  ○ Job Aid: Care of patient on Suicide Precautions
			  ○ Patient Support Handout
			• Laminated Admission Assessment
			  ○ Substance History
			  ○ Gender Identity/Sexuality
			  ○ Safety/Coping
			  ○ Home/Family
			  ○ Education
			  ○ Suicide Risk
			• 2-tables
			• 2 chairs

Part 2 – Door Chart/Note & Learner Instruction

Setting (place/time)

- Patient's Room
- Admission

Participants

- Koda – SP Actor
- Caregiver – SP Actor
- Clinical RN
- Clinical RN Resource & Observer
- Facilitator

Patient Name: Koda
Age: 16
Gender: Gender non-conforming
Chief Complaint: Suicidal Ideation - Anxiety

Instructions to Learners:

- Koda is a 16-year-old that was admitted to River 4 from the Emergency Department for Suicidal Ideation and anxiety
- In the emergency department Koda changed into maroon scrubs and completed a person's search
- Koda is awaiting a PBMU admission
- This is Koda's first few minutes in the unit

For this case you will:

- Provide Patient Support Handout with caregiver and family
- Complete patient watch education
- Complete an environmental and belongings search
    - Include patient AND caregiver belongings
- Complete a Focused Admission Assessment
    - Substance History
    - Gender Identity/Sexuality
    - Safety/Coping
    - Home/Family
    - Education
    - Suicide Risk
- Validate patient and caregiver experience
- Respond therapeutically to patient and caregiver
- Set Clear and Honest Boundaries

Part 3 – Content for SPs

Cue/Action	Clinical RN	Koda	Taylor/Caregiver
Introduction	Introduce Self to caregiver and Koda	Appear withdrawn and anxious Minimal eye contact, low voice, wringing hands	Sitting down sad in the room. Tearful. Say hello and engage with RN
Provide patient support handout and education patient/caregiver	Explain patient support and Patient Watch Include information about bathroom monitoring If enough participants the other "RN" in the room introduce as the Patient Watch Personnel Explain belonging and environmental search at the start of each shift	If the nurse states: you will be monitored in the bathroom and shower respond→ "no, I don't want someone to watch me" "This feels so intrusive, it basically is like I am in jail" Begin to get agitated but continue to have poor eye contact and a low voice If the clinical RN uses validating statements: become less agitated but maintain poor eye contact	"What if Koda doesn't want to be searched?" Become increasingly tearful as the RN explains the hospitalization plan
Search patient & caregiver belongings	Search patient and caregiver belongings Review the "unsafe items" with the caregiver and ask "do you have any of these items" Remove items that are unsafe and instruct caregiver to take home	Appear frustrated Hold onto bag and state "This is mine, do you really need to go through it?" Consider statements while RN is going through caregiver belongings including: "Hey knitting helps me relax, I think I should keep those" When RN validates feelings, reluctantly give bag to nurse	When the RN asks if you have certain items state: Why do you have to review my things, I am not the patient? When the nurse explains why the search, state "would if be okay if we looked at my things together? Continue to appear sad, tearful, but cooperative

Cue/Action	Clinical RN	Koda	Taylor/Caregiver
Environmental Sweep **Facilitator Note: This should be ½ way**	Search the environment and remove any potentially unsafe items	Anxiously watch the nurse as they search the room. Ask questions like "why are you removing that?" as items are collected	State "I will be here with Koda the whole time, is it really necessary to remove all of these things"
Admission Assessment-Substance History	Do you use tobacco?	Be reluctant to answer questions until RN asks caregiver to leave	When RN asks you to leave, grab your belongings and leave the room crying
	Tobacco Use? Alcohol Drugs	"No" "Yes, beer " "Just weed"	
Admission Assessment-Gender Identity/Sexuality	 Sexual Orientation Gender Identity Pronouns	Respond: are you sharing with my parent? "Queer" "Fluid" "They/Them/Theirs"	
Admission Assessment-Safety/Coping	Do you feel safe in home? Concerns about family being harmed?	"Yes, do I really have to answer these?" "No"	
Admission Assessment-Home/Family	Parents family status Living Arrangements Sleep Habits Friends/Peers Exercise	"My dad died last year" "Apartment" "I can't sleep, when I finally fall asleep its already time to wake up" "I have a small group of friends" "I run track"	
Admission Assessment-Education	In the last two weeks how many days of school missed?	"I don't like school" I have been skipping but don't tell my mom	
Admission Assessment-Suicide Risk		For all of these answers, be quiet & scared	
	• Have you wished you were dead? • Have you felt that you or your family would be better off if you were dead? • have you been having thoughts of killing yourself? • Have you ever tried? • Thoughts now?	• "Yes" • "Yes" • "Yes" • "No" • "Yes"	

Past Medical History (PMH): (consider the following)

Illnesses/Injuries: None
Hospitalizations: None Prior
Surgical History: None
Medications (Prescription, Over the Counter, Supplements): Prozac
Allergies (e.g. environmental, food, medication and reaction) No Known Allergies

Social History:

Substance Use (past and present) **Drug Use:** Marijuana **Tobacco Use:** None **Alcohol Use:** Drinks beers in room
Home Environment: • Lives with widowed mother • Recently moved to smaller apartment
Social Supports: • Mother
Occupation: • Student at Public School
Leisure Activities: • Track
Diet: • Normal
Exercise • Track practice

Part 4 – Facilitator Checklist

Action/Observation		Complete	Comments
Introduce Self to the Patient and Caregiver		**Yes No**	
Provide Patient Support Handout with caregiver and family		**Yes No** ☐	
Complete Patient Watch Education		**Yes No**	
Complete an environmental and belongings search (patient AND caregiver) **Items to be found:**		**Yes No**	
Caregiver- • Knitting Needles • Yarn • Lanyard • Contact case w/ pills • Nail tools or tweezers	**Patient-** • Colored Pencils • Headphones • Pencil Sharpener (only on one backpack as carabiner) • Scissors • Staples		
Action/Observation		**Complete**	**Comments**
Establish a collaborative relationship with the mental health patient and their caregiver		**Yes No**	
Identify signs of patient escalation (if applicable)		**Yes No**	
Acknowledge and validate patient experience		**Yes No**	
Acknowledge and validate Caregiver experience		**Yes No**	
Respond therapeutically to the patient & caregiver		**Yes No**	
Set clear and honest boundaries		**Yes No**	
Ask Caregiver to leave the room		**Yes No**	
Complete suicide assessment		**Yes No**	

Appendix S: Contingency Plan

Primary Plan (no contigencies)	Secondary Plan	Tertiary Plans

• In-Person learning event
• Includes
  • 4-hour class time
  • Multimodal learning facilitation
  • SP Simulations
	• Virtual learning event
	• Includes
	  • 4-hour class time
	  • Multimodal learning facilitation
	  • SP simulations using breakout rooms
		• Virtual learning event
		• Includes
		  • 2.5-hour class time
		  • Multimodal learning facilitation
		  • no SP simulation

Appendix T: Standard Work Process for Each Class

Standard Work Process		
Class Date:		
Timing	**Action**	**Complete**
10-days prior to class	Course reminder sent to participants and facilitators	☐
7-days prior to class	Simulation reminder sent to SP actors	☐
3-days prior to class	Course and simulation reminder sent to participants, facilitators, and SP actors	☐
Immediately after class	Reaction survey distribution to participants	☐
1-day after class	SP actor payroll	☐
1-day after class	Finalize and "pass" roster in learning management system	☐
7-days after class	Post-course data collection survey sent to participants	☐

Appendix U: Pediatric Mental Health Knowledge Assessment

Pediatric Mental Health Knowledge Assessment

Please Select the Best Answer.

This is the identification or understanding of another's situation, feelings, or motives:

A) Sympathy
B) Empathy
C) Compassion
D) Integrity

How would you best communicate with a patient experiencing auditory hallucinations?

A) Validate the person's experience, state that the voices are not real, offer help, have the patient focus on you, and provide safety
B) Validate the person's experience, state that you too hear the voices, offer help, have the patient focus on you, and provide safety
C) Validate the person's experience, do not acknowledge that the person is hearing voices offer help, have the patient focus on you, and provide safety
D) Validate the person's experience, state that you do not hear the voices, offer help, have the patient focus on you, and provide safety

How would you communicate with a patient who is experiencing depression?

A) Active listening, empathy, reassurance, and validate feelings
B) Active listening, sympathy, reassurance, and validate feelings
C) Active listening, compassion, reassurance, and validate feelings
D) Active listening, reassurance, and validate feelings

You are admitting a 14-year-old patient with Autism Spectrum Disorder (ASD). The patient appears to be not listening and having trouble responding to your admission questions. As the nurse, what do you do next? Select all that apply:

A) Ask the parents to leave the room
B) Ask additional staff members to leave the room
C) Reduce bright lighting in the room
D) When asking questions, say less
E) When asking questions, say more
F) Speak slowly
G) Presume the patient cannot understand you
H) Use simple gestures or visuals

Today is the first day you are caring for an 8-year-old patient with Autism Spectrum Disorder (ASD). Which of the following should not be included in their plan of care for the day?

A) Engaging the parent/caregiver in a conversation about their level of participation in the patient's care
B) Intentionally providing specific descriptions about the tasks you are doing while in the room with the patient
C) Intentionally not telling the patient about an MRI during the day so they do not worry
D) Limit your use of open-ended questions

You are taking care of a 17-year-old patient who has an eating disorder. It is the patient's birthday. You walk into the room and notice that they have not yet eaten their birthday cake. What is the most therapeutic response to say to the patient?

A) Let's celebrate your birthday! How would you like to do that?
B) Why didn't you have a piece of cake on your birthday?
C) Is there something wrong with this cake?
D) Why don't you just eat your cake?

While placing a PIV on your patient, they became agitated and required a physical hold (supported by child life) for successful IV placement. You are now debriefing the experience with the patient, caregiver, and supporting staff. What statement indicates you are using therapeutic communication with your patient?

A) See, it was just a poke! Does it feel better now?
B) Great job, next time let's try this without using the child life specialist! What do you think?
C) We are all finished. Can you tell me about how that situation felt for you?
D) Nice work, would you like to pick an item from the "treasure bin"?

Which of the following are strategies to verbally de-escalate a patient? Select all that apply:

A) Disagreement
B) Agreement
C) Express limits as threats
D) Be firm
E) State behaviors that will not be tolerated
F) Offer choices
G) Call out negative behaviors
H) Reinforce positive behaviors

Understanding your internal reactions/bias and external reactions to patients experiencing escalating behaviors is considered:

A) Situational Awareness
B) Awareness of the Patient Experience
C) Environmental Awareness
D) Self-Awareness

There is an active code-blue happening on the unit, you are the nurse checking in on other patient's while other nurses on the unit are tending to the code-blue. You walk into a 7-year-old patient's room. They appear overwhelmed, alarmed by the loud noises, and scared. What type of awareness are you, as the nurse, assessing?

A) Situational Awareness
B) Awareness of the Patient Experience
C) Environmental Awareness
D) Self-Awareness

What are some common warning signs that a patient is escalating? Select all that apply:

A) Violence
B) Rapid mood swings
C) Disconnection from reality
D) Restlessness
E) Threats
F) Anger
G) Isolation
H) Repetitive Behavior

A 13-year-old patient with a history of experiencing physical abuse and verbal abuse is NPO for a procedure. The patient cries and is agitated when the nurse tries to interact with them. What risk factors might this patient have for escalating behaviors? Select all that apply:

A) Physical Abuse
B) Verbal Abuse
C) Hunger
D) Cognitive Delay

What is the three-step approach to de-escalation?

A) Non-verbally engage with the patient, Establish a collaborative relationship, Non-verbally de-escalate the patient
B) Establish a collaborative relationship, Non-verbally engage with the patient, Mechanically restrain the patient
C) Verbally engage with the patient, Set Boundaries with the patient, Non-verbally de-escalate the patient
D) Verbally engage with the patient, Establish a collaborative relationship, Verbally de-escalate the patient

Remaining calm & non-confrontational, using open body language, and non-verbal cues including eye contact and head-nodding are all ways to engage with the patient by:

A) Respecting personal space
B) Being Non-Threatening
C) Establishing Verbal Content
D) Being Concise

The "Four R's" of Trauma Informed Care include:

A) Realize, Respond, Re-traumatize, Recall
B) Realize, Recognize, Respond, Resist Re-Traumatization
C) Recall, Recognize, Respond, Resist Re-Traumatization
D) Realize, Recognize, Recall, Resist Re-Traumatization

This is described as an event or circumstance that is experienced by an individual as physically harmful, emotionally harmful, or life threatening, which results in adverse effects on the individual's functional well-being:

A) Crisis
B) Adverse Experience
C) Shock
D) Trauma

True or False: A hospital admission can be a traumatic experience

A) True
B) False

True or False: Traumatic experiences increase the risk for health-risk behaviors and chronic health conditions

A) True
B) False

You are caring for a patient admitted to the medical unit for pre-transplant liver failure. The patient appears disengaged, exhibits self-harm behaviors while hospitalized, and is persistently anxious. which of the patient's behaviors may be a result of trauma?

A) Disengagement
B) Self-harm behaviors
C) Anxiety
D) All of the above

You are caring for a patient admitted to the medical unit for pre-transplant liver failure. The patient appears disengaged, exhibits self-harm behaviors while hospitalized, and is persistently anxious. What trauma might the patient have experienced?

A) Family support system
B) Anxiety
C) Chronic Illness/Hospitalization
D) Disengagement

Appendix V: Pediatric Mental Health Self-Efficacy Assessment for Non-Psychiatric Nurses

Are you currently involved in any of the following work-related activities? (Please select all that apply)

1) Coordinating Council
2) New RN Support Group
3) Nurse Camp
4) Nurse Mentor Program (as a mentee)
5) Nurse Mentor Program (as a mentor)
6) Nurse Residency Program
7) Nursing Ethics
8) Operations Council
9) Precepting nursing students
10) Professional Development Council
11) Quality Practice Improvement Council
12) Research, EBP or QI project(s)
13) Other (please list)

Self-Efficacy Statements:

0-100 Scale (Built as sliding scale in RedCap)

- 0= Cannot Do at All
- 50= Moderately Certain I Can Do
- 100 = Highly Certain the I Can Do

Please rate how confident you in your ability to do each of the following:

1. Plan and prioritize my day when assigned a mental health patient
2. Use previous learned knowledge, skills, and abilities when caring for a mental health patient
3. Establish a collaborative relationship with the mental health patient and their care giver
4. Use therapeutic communication to interact with a mental health patient
5. Have empathy for the patients that I am caring for
6. Identify a patient that is in crisis
7. Communicate effectively with a mental health patient?
8. Identify risk factors for escalating behaviors
9. Implement non-verbal de-escalation techniques for an escalating patient
10. Implement verbal de-escalation techniques for an escalating patient
11. Recognize and manage my internal reactions/bias to patient behaviors
12. Recognize and manage my external reactions to patient behaviors
13. Recognize behaviors that are seen in patients with a history of trauma
14. Consider the patient's perspective in a stressful situation
15. Consider the patient's potential triggers in the hospital
16. Discuss the patient's behaviors with the patient and/or care giver
17. Identify psychosocial needs in a patient's plan of care
18. Identify just-in-time resources for helping with my mental health patient assignment
19. Seek independent continuing education learning activities to support my confidence caring for mental health patients
20. Recall previous experiences in caring for mental health patients to apply to current patient needs

Appendix W: Pediatric Mental Health Course- Reaction Survey

Was the information contained in today's presentation applicable to your practice?

1) Yes
2) No

Did the course meet your personal learning objectives?

1) Yes
2) No

How would you describe the room, space, lighting, acoustics, and A/V support?

1) Poor
2) Fair
3) Good
4) Very Good
5) Excellent

Please Rate the Presenter:

1) Faculty Mastery of Subject
    a. Poor
    b. Fair
    c. Good
    d. Very Good
    e. Excellent
2) Appropriateness of Teaching Methods
    a. Poor
    b. Fair
    c. Good
    d. Very Good
    e. Excellent
3) Overall Strength of Presentation
    a. Poor
    b. Fair
    c. Good
    d. Very Good
    e. Excellent

What have you learned that you will take to your practice?

Any additional comments or feedback?

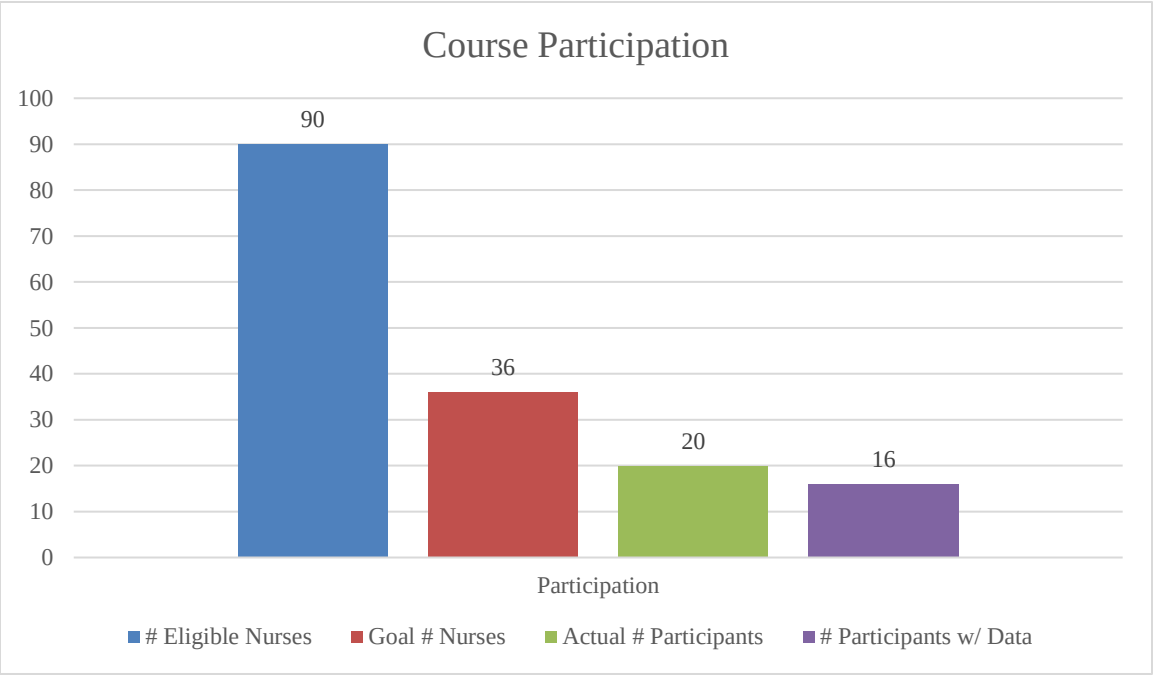
Appendix X: Post-Implementation Short-Term Outcome Status

Outcome	**Result**	**Outcome Status** (met/not met)
By August 2022, 30% of nurses on the pediatric medical units will have participated in pediatric mental health standardized patient simulations	**Number of Participants:** 20 **% Medical Unit RNs:** 22%	Not Met
By August 2022, the average score of participants is ≥80% on a post-education summative knowledge assessment.	**Average Score:** 77%	Not Met
By August 2022, the average score of participant self-efficacy improves by 20% for pediatric mental health patients using a self-efficacy survey.	**Average Increase in Self Efficacy:** 25%	Met
By August 2022, the Psychiatric and Behavioral Health Unit (PBMU) Resource RN team reports a 5% decrease in call volumes for medical unit support.	**Medical Unit to Behavioral Health Support Call Volumes:** + 20%	Not Met
By August 2022, 30% of medical patients have documented mental health intervention specific to their mental health needs in EMR care plan each shift.	**Unable to obtain – reporting change**	Not Met

Appendix Y: Course Participation Reporting

Figure 5:

Course Participation Report



Appendix Z: Course Participant Demographics

Figure 6:

Participant Demographics: Age

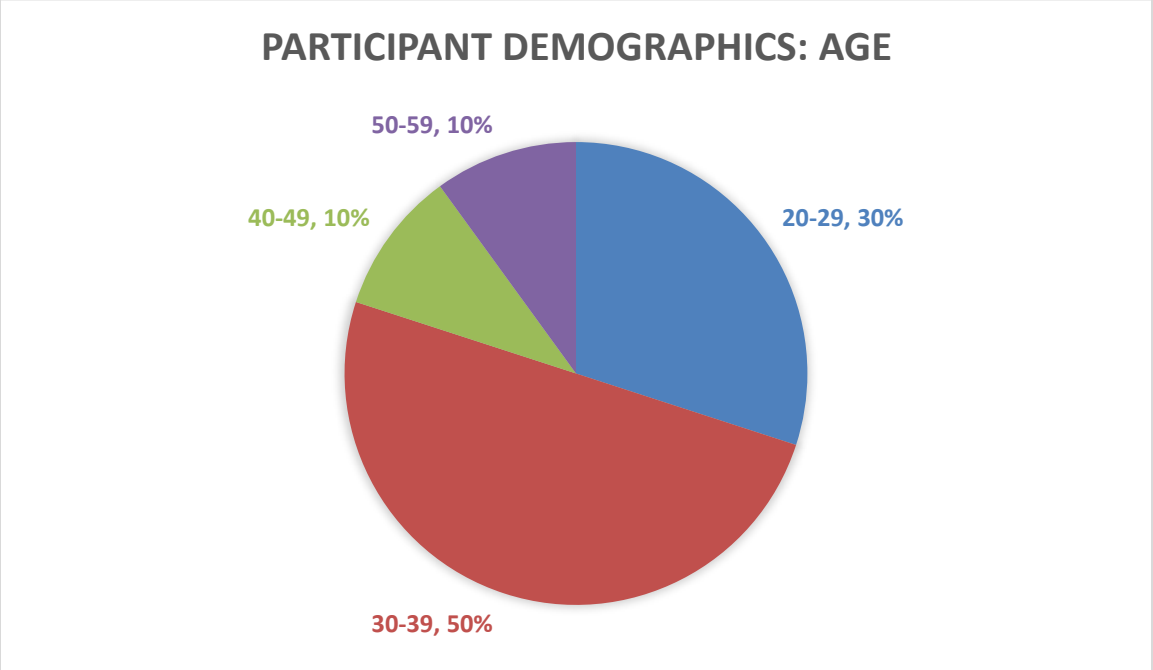


Figure 7:

Participant Demographics: Years of RN Experience

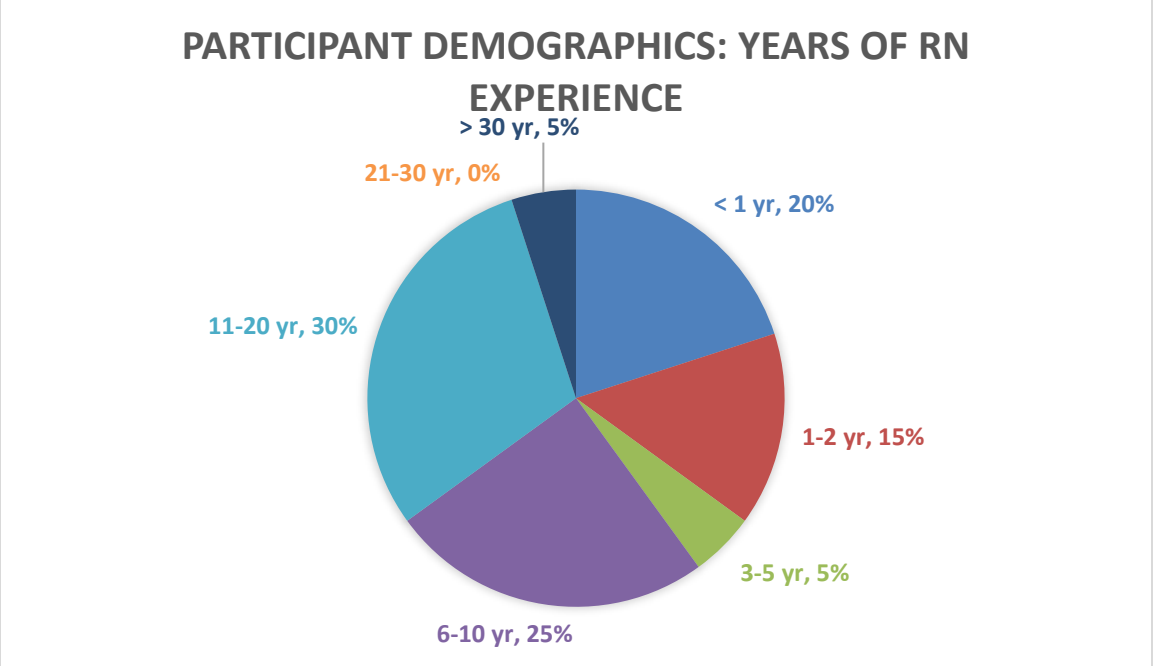


Figure 8:

Participant Demographics: Years of RN at Pilot Organization

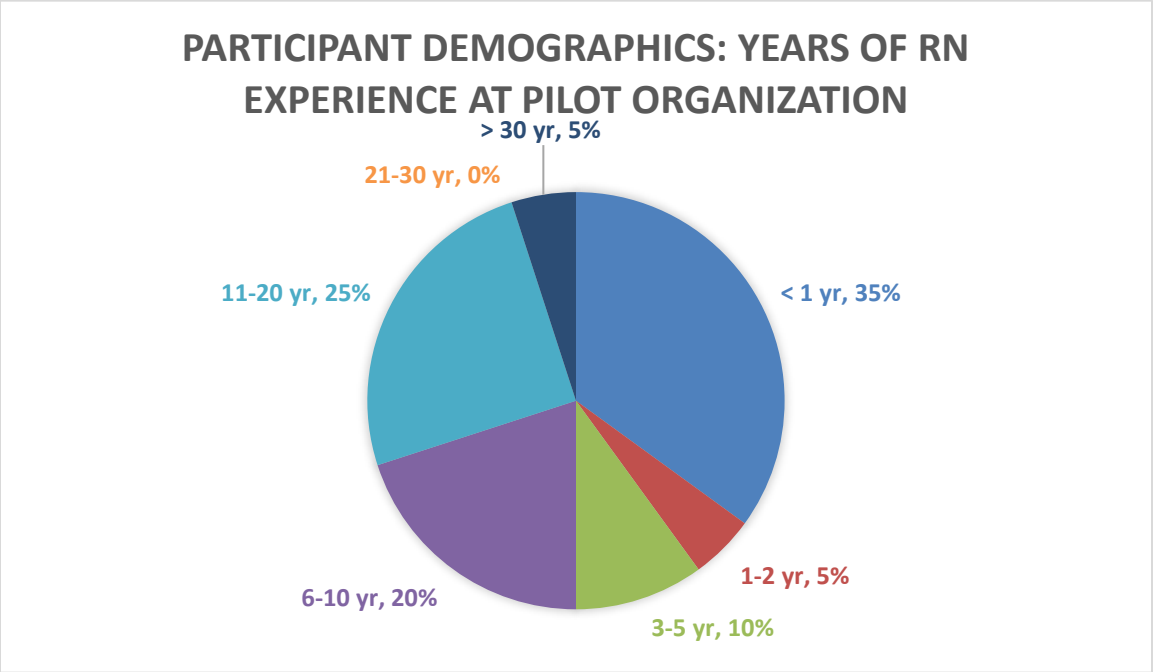


Figure 9:

Participant Demographics: Hired Shift

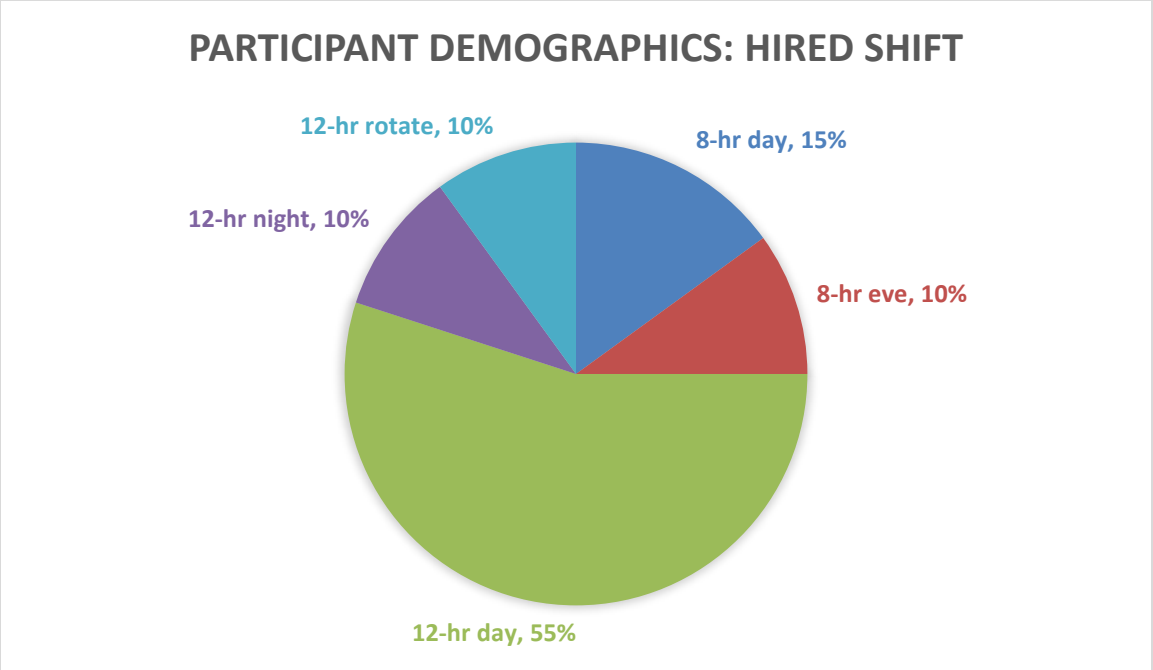


Figure 10:
Participant Demographics: Hired FTE

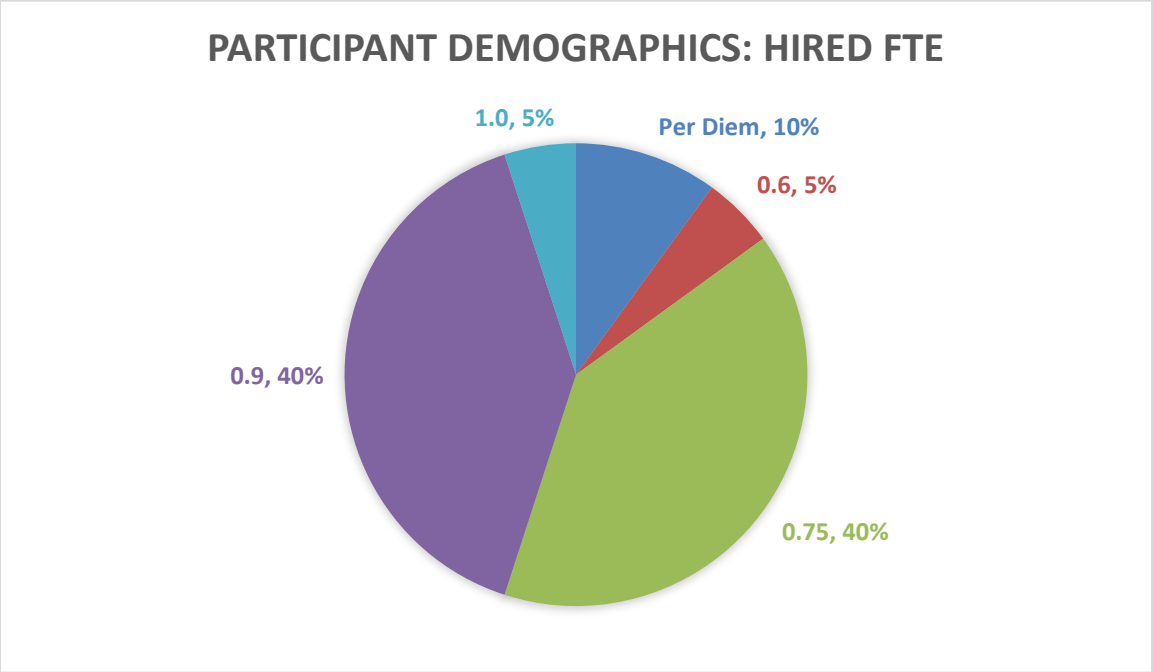
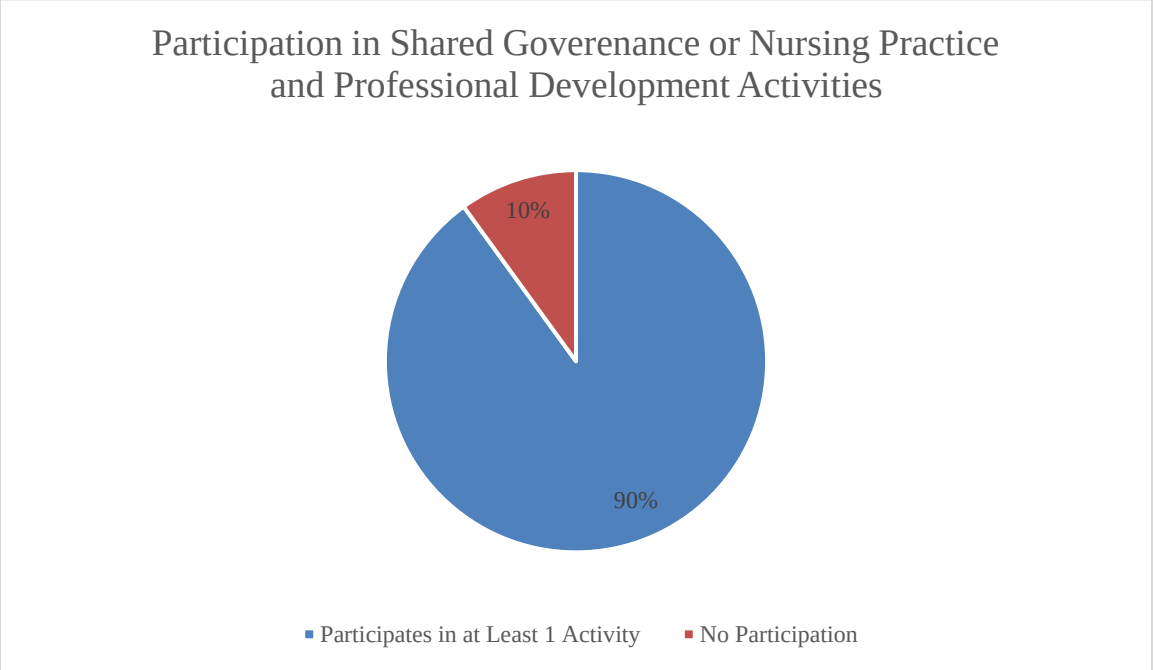


Figure 11:
Participant Demographics: Participation in Shared Governance or Nursing Practice & Professional Development Activities



Appendix AA: Pediatric Mental Health Knowledge Assessment Results

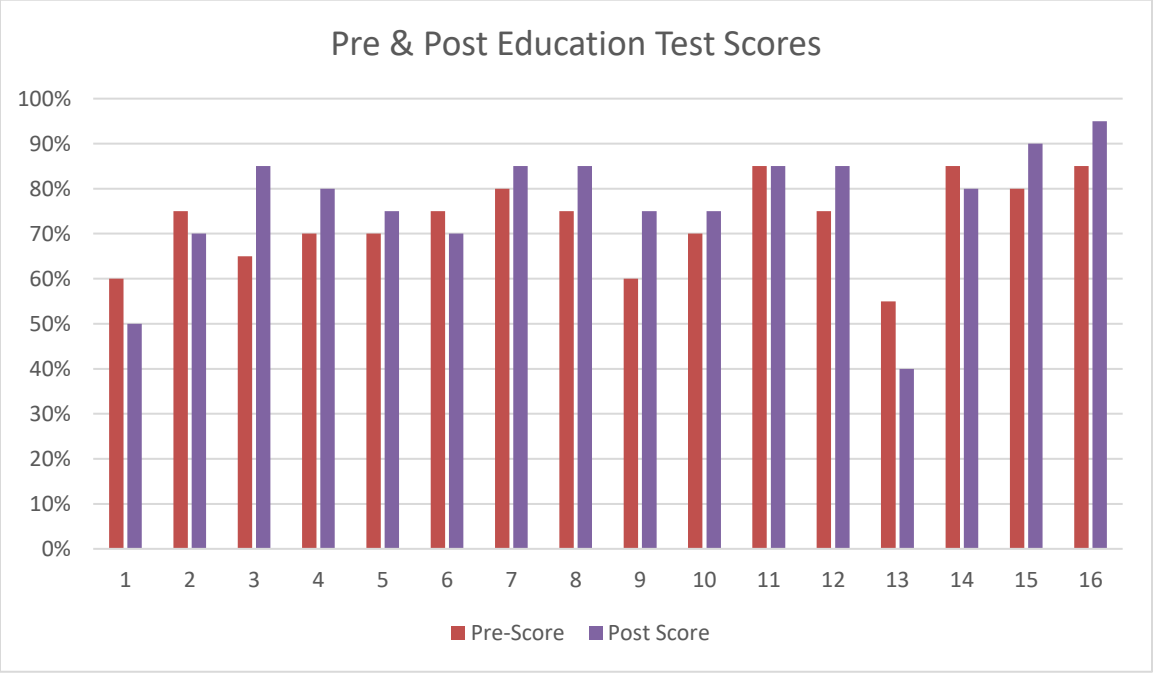
Table 3:

Pediatric Mental Health Knowledge Assessment Participant Scores

Participant	Pre-Education Score	Post-Education Score	Score Change
1	60%	50%	-10%
2	75%	70%	-5%
3	65%	85%	20%
4	70%	80%	10%
5	70%	75%	5%
6	75%	70%	-5%
7	80%	85%	5%
8	75%	85%	10%
9	60%	75%	15%
10	70%	75%	5%
11	85%	85%	0%
12	75%	85%	10%
13	55%	40%	-15%
14	85%	80%	-5%
15	80%	90%	10%
16	85%	95%	10%
Class Average:	73%	77%	+4%

Figure 12:

Pediatric Mental Health Knowledge Assessment Pre and Post Education Test Score Comparison



Appendix BB: Pediatric Mental Health Self-Efficacy Survey Results

Table 4:

Pediatric Mental Health Self-Efficacy Scores

Participant	Pre-Education Score	Post-Education Score	Score Change
1	41	77	36%
2	57	76	19%
3	55	73	18%
4	94	98	4%
5	57	92	35%
6	70	85	15%
7	72	90	18%
8	76	87	12%
9	75	79	4%
10	68	83	15%
11	56	92	37%
12	65	85	20%
13	52	74	22%
14	62	79	17%
15	74	94	20%
16	67	75	8%
Class Average:			25%

Appendix CC: Medical Nurse Calls for Behavioral Support Resource

Table 5:

Medical Nurse Calls to Behavioral Support Resource

	3/17-5/31	**6/1-7/15**	**Call Rate Change**
Call Rate	0.6 calls/day	0.8 calls/day	20%

Table 6:

Medical Nurse to Behavioral Support Resource Call Categories

Call Category	**Pre-Implementation % of Calls**	**Post-Implementation % of Calls**	**Change in Calls**
Suicidal Ideation Support	9%	11%	2%
Nurse Coaching & Education	36%	28%	-8%
Direct Patient Care Request	47%	49%	2%
Eating Disorder Support	2%	5%	3%
Other	6%	7%	1%

Appendix DD: Medical Nurse EPIC Documentation

Figure 13:

Medical Unit Suicide Risk Assessment Documentation

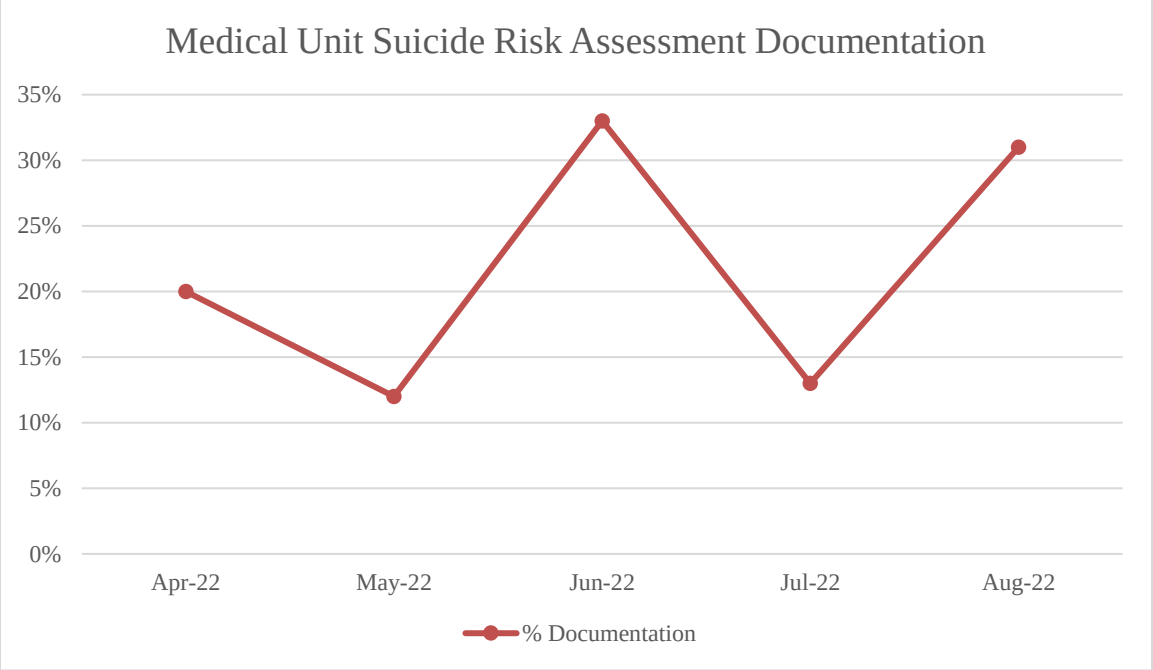
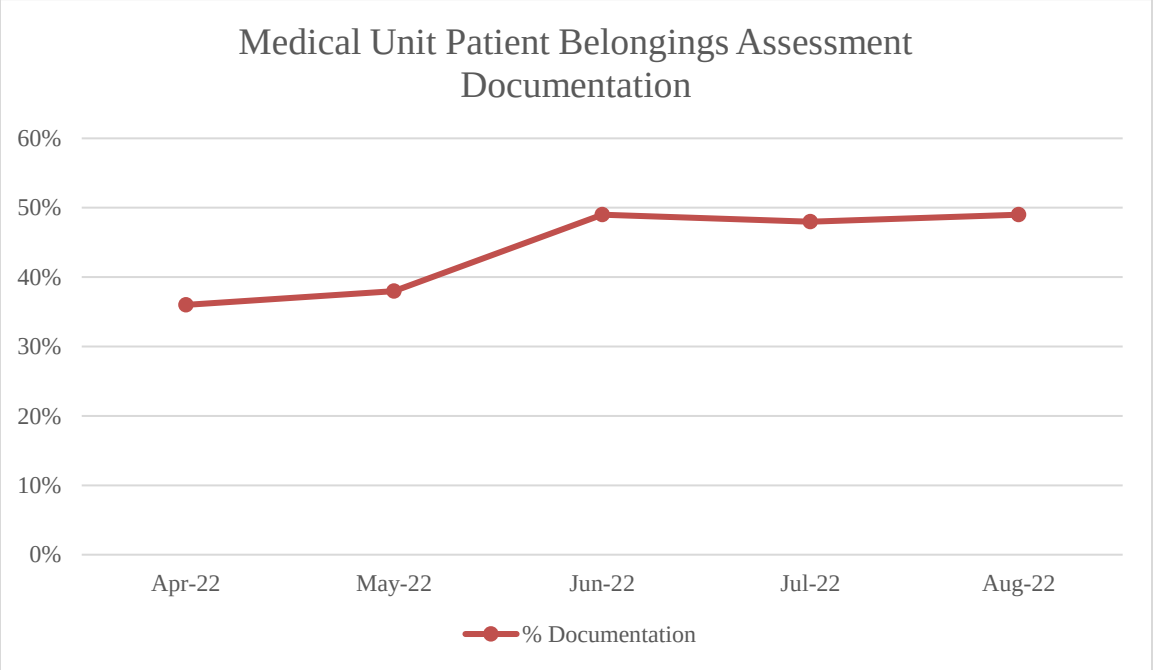


Figure 14:

Medical Unit Patient Belongings Assessment Documentation



Appendix EE: Course Participant Reaction Survey Qualitative Report

Table 6:

Reaction Survey Qualitative Data: Course Participant Self-Report of Learnings

Participant Responses:
• Setting boundaries
• How to offer choices and balance the tasks that need to be done with patient needs/preferences that you can meet in order to accomplish those tasks
• Good for me to practice SI intake/admission. Don't recall ever doing it before.
• Applying self-awareness, situational awareness and patient awareness to all patient and family interactions. How trauma and childhood experiences impact behaviors and how to best support patients while they are admitted to the hospital with mental health concerns.
• Doing good room searches. Reflective listening.
• Ask the tough questions, set boundaries
• I learned a lot strategies that I can use for deescalating patients and now I know more about trauma informed care
• To be more direct with eating disorder patients. Acknowledge patients' feelings and ask open ended questions. Ask the hard questions
• Some great tools for caring for mental health patients and caregivers
• Tips on how to interact with patients within s TIC scope
• Reframing to a goal-oriented perspective for my patients, things to look for when doing a belongings search.
• Strategies for communication with mental health patients, aspects of trauma informed practice.
• De-escalation tactics, responses to escalating patients.

Table 8:

Reaction Survey Qualitative Data: Course Participant Additional Feedback

Participant Responses:
• Please do more simulations. Such a good exercise
• Excellent
• Thank you
• Excellent
• So much, many take aways in class
• Scenarios were super helpful
• I learned a lot and am grateful for this learning opportunity. I think every medical nurse should take this training
• Amazing! Loved the simulation
• So great, thank you!
• Such an amazing class! This has taught me a lot about communicating with patients who have mental health needs

Appendix FF: Revised Statement of Operations

Operating Income		**$ -**
	Revenue Total	**$ 48,716.97**
Source	**Description**	**Amount**
This is a subsidized project with no associated revenue. In-kind contributions by the sponsoring organization and DNP student.	In-kind personnel wages: clinical RN, unit-based educator, unit-based CNS, LMS admin support, and DNP student.	$ 35,544.00
Nursing Research Grant	Personnel wages: SP actor, data analyst, nursing quality leader	$10,000.00
In-Kind Materials and Supplies	In-kind materials and supplies: toner, paper ream, and thermal lamination sheets.	$243.00
In-kind Equipment	In-kind equipment: participant computers, project planner computer, thermal laminating machine, projector, audio/visual technology, and printer.	$859.97
In-kind IT	In-kind IT: Microsoft Office Business-Standard, Tableau Viewer-business membership, and Cornerstone LMS monthly access.	$390.00
In-kind Space	In-Kind Space: Conference Room, 6 - breakout rooms	$ 1,680.00
	Expenses Total	**$ 48,716.97**
Expenses	**Description**	**Amount**
Personnel	Clinical RN, Unit-Based Educator and CNS, SP Actor, LMS Admin Support, Nursing Data Analyst, Nursing Quality Leader/Auditor, and DNP student wages.	$45,544.00
Materials & Supplies	Thermal lamination sheets, toner, & paper ream.	$243.00
Equipment	Computer, thermal laminating machine, & printer.	$859.97
IT	Microsoft Office Business Standard, Tableau Viewer Business, & Cornerstone LMS Access.	$390.00
Space	Conference Room & 6- Breakout Rooms	$ 1,680.00