Fall 12-14-2018

Nursing Partnership With Patients, Parents and Families for Safety Through Simulation

Courtnay Caufield
cecaufield@dons.usfca.edu

Nursing Partnership with Patients Parents and Families for Safety Through Simulation

Courtnay E. Caufield, RN, DNP(c), CENP, CNML, NE-BC, CPN

University of San Francisco School of Nursing

DNP Committee Members:

Brian Budds, JD, MS, RN Chair

Mary Lynne Knighten, DNP, RN, PN, NEA-BC Committee member

Acknowledgements

I would like to acknowledge those who have supported me through ought my journey towards my Executive Leadership Doctor of Nursing Practice (ELDNP) degree. This achievement would not have been possible without the support of my rock, my husband, Grant who has always pushed me to challenge myself. I thank the time my children Brandon, Sydney and Bryce also donated to my school, who gave me the time to study and write when they would have rather had time with their mom. I want to also acknowledge my colleagues and friends in this cohort whom I have grown to respect especially my teammate in Todd Griner. Thank you to CNS, Tessie Guerrero who is as passionate about simulation as I am and my managers Maureen Chin and Jen Underhill who supported my time away over the last two years. Lastly, I would like to thank committee member, Dr. Mary Lynne Knighten for her compassion, honesty, inquisitive thought, and supportive guidance and my Chair, Brian Budds who I look at as someone who has led me down the path of my degrees with support and class.

Table of Contents

Abstract

Problem: The importance of communication between nurses, patients, and their family members with respect to treating each other as partners in safety cannot be overstated. It is imperative that families and patients feel empowered to speak up and report clinical errors at any time and be able to communicate effectively to prevent harm and encourage communication.

Context: This is especially important in the acute care setting, where patients may be in contact with multiple people and processes daily. Attention to this safety partnership can be established through improvements in patient satisfaction scores, which are usually collected from patients and their families after discharge, as well as other measures, such as the number of concerns reported and caregiver confidence.

Intervention: This project aimed to translate existing evidence into practice to explore nurses' ability to promote safety partnerships with patients and families.

Measures: This was measured by responses given by pediatric nurses working on one pediatric unit. A survey was administered before and after simulation training to evaluate the nurses comfort with these conversations. In addition, HCAHPS (also known as Hospital CAHPS) stands for Hospital Consumer Assessment of Healthcare Providers and Systems and is a standardized survey of hospital patients that captures patients' unique perspectives on hospital care for providing the public with comparable information on hospital quality. These are considered patient satisfaction scores and are reported post discharge. The trend in HCAHPS scores were reviewed to monitor for efficacy of the patient's, patient's, and family's ability and comfort to speak up and report any errors and safety concerns. Lastly, the incident reporting system was used to track, trend, and compare reported events to near miss events by showing an increase in nurses identifying and reporting safety concerns before they occur. The simulation training was

focused on communication, listening, and clarifying to facilitate a culture of safety between the nurses and the patient families. Listening carefully to the voice of the patient as part of the core care team is imperative for providing patient- and family-centered care that is conducive to learning and promotes an atmosphere of quality and safety. In patient- and family-centered care, patients and families define their "family" and determine how they will participate in care and decision-making. A key goal is to promote the health and well-being of individuals and families, and to maintain their control (Johnson, B.H. and Abraham, M.R., 2012).

Conclusions: This project produced both quantitative and qualitative results supporting this concept and the results demonstrated an improvement in HCAHPS scores reported by parents about their confidence in reporting mistakes or errors. The results of the post-simulation training survey exhibited growth in the nurse's opinion about their abilities to have conversations with patients and families around safety and reporting mistakes. The total percentage is the number of parents or patients post discharge that reported that they were confident in reporting mistakes. In addition, other outcomes included staff participant confidence and comfort in reporting near misses or close calls in the units. This was demonstrated by an increase in nurse reported confidence through a survey before and after the intervention. Additionally, quantitative data from the incident reporting system in the organization resulted in an increase in near miss and close call events and a decrease in reported actual events in the unit where the intervention took place.

This information has continued to be reported monthly at shared governance committee meetings to ensure that staff members and the multidisciplinary team could see results and share comments as well as what was learned. Noteworthy outcomes from the project include an

increase in HCAPS scores to the questions focused on reporting mistakes or near miss errors and/or events.

One goal was to increase the confidence in identifying and speaking up about concerns or near miss events. The number of actual events or harm that had occurred should be lower than reports of potential events. After the intervention, the number of entries in the organization's error reporting system that identified "near misses" or "close call events" increased from a total reported of three percent to thirty seven percent (67 out of a total of 125 reports). This increase displays a recognition by the nursing staff to report potential harm and near misses, not only actual mistakes; and speak up to prevent actual harm in future cases.

Keywords: Patient- and Family-Centered Care, communication, simulation, safety, culture of safety, partnering with parents, patient safety, reporting mistakes, nursing communication, partnership for patients, parents and families for safety.

Nursing Partnership with Patients Parents and Families for Safety Through Simulation

Section II. Introduction

Nurses in acute care pediatric settings must ensure that their patients, as well as parents and families, understand the importance of reporting any errors or omissions in the care of the child. The effectiveness of the nurse's efforts to convey the importance of such career safety communication (CSC) can be demonstrated through simulated encounters in training environments. In the role of project manager, the term was constructed "career safety conversations" (CSC) and this is being introduced through this project to create an understanding about the impact of conversations and the ability to have those conversations throughout the nurses' career. Thus, having these conversations is not situational; the goal is to impact the way nurses practice and how they have safety conversations with all patients, colleagues and families. This will make an impact in how they approach and value the conversations and their own ability to have these conversations about safety throughout their career. Simulation is an effective vehicle to train, practice and utilize these CSC conversations

Scores on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey were evaluated before and after the simulation training to gauge the impact from the patient and family perspective. There were multiple areas of focus that intermingle and contribute to the perception of effective nurse communication. Focus areas included communication and perceptions of effective nurse communication with families. The purpose of the HCAHPS survey is to provide a standardized survey instrument and data collection methodology for measuring patients' perspectives of the hospital experience after they are discharged from the hospital to home.

In order to improve the communiaiton around reporting mistakes and conversations around safety with parents and patients nurses participated in simulaiton training. The effectiveness of this training was evaluated by surveying nurse participants before and after the simulation intervention and evaluating the perceptions of the clinical nurses about their confidence in multiple areas including; their ability to confidently convey to patients and family members the importance of reporting any mistakes, partnering with caregivers for safety, and having clear effective communication. The nurses participating in this project work is an acute care pediatric unit, with 32 licensed beds with an average daily census of 8 patients and which resides in a large academic medical center in the urban metropolitan community of Los Angeles, California. The target population for this project included all the current pediatric nurses from all shifts who are assigned to work in a 32-bed pediatric inpatient unit at an urban academic medical center. The current state is a low average daily census of 5 patients as compared to the budgets census of 9 patients. The nurses consist of 50% staff with less than 3 years' experience while the tenure for those over 3 years' experience averages 13 years. This unit has fewer than average adverse events, minimal harm reported, however the feedback from the patient engagement and patient satisfaction survey (HCAHPS) has returned data indicating that the patients and families leaving this unit lack communication with the care team, and the nurses did not explain things in a way that parents could understand. In addition, the ability to report a mistake in "your child's health, is one of the lowest scoring outcome measures reported in this unit. The nurses verbally indicated that they would be willing to participate voluntarily in the project and were open and receptive to change. The project manager is the Associate Director, and participation in this intervention is part of their usual job responsibilities. Participation was accommodated, encouraged, and was voluntary. It also ensured respect to all ethical considerations and privacy

was maintained by commitment by the project manager to keep identification of participant responses confidential. In order offset any ethical concerns, participants were reminded that they had the ability to opt out and that their participation was entirely voluntary. For those nurses who participated, they were given protected time to participate in the training.

Problem Description

Studies suggest the ability of the bedside nurse to connect to the purpose of effective communication, and their ability to speak up about their care with patients and families, has a major impact on harm reduction, improves safety, promotes the ability of patients and families to report mistakes, and improves their perceptions of effective communication (Rosen, Stenger, Bochkoris, and Kwoh, 2009). The significance of nurses' lack of confidence in being able to communicate and report mistakes was made evident in an article published in *Nursing Economic$* (Ponte, Connor, DeMarco, and Price, 2004), where there was a clear focus on the link between patient and family centered care and safety, and where this pediatric unit stated that they want to replicate in the future. Simulation training can improve caregiver confidence and ability to report concerns. This was demonstrated in a 2010 study that discussed a method to encourage caregivers sharing and reporting of errors. A Morbidity and Mortality (M&M) conference was created to inform frontline providers about adverse events that occur at the hospital and to engage their input in root cause analysis. This encouraged the focus on prevention and opportunities to discuss and develop improvements, with a focus on systems-based thinking among clinicians (Szekendi, Barnard, and Creamer, 2010). This system-based thinking was a key to establishing a culture of safety. To do this, in addition to M and M conferences, frontline nurses should be confident in their ability to conduct safety conversations with parents, patients, and families and have opportunities to practice doing so. Promoting the involvement of patients

and their families in active CSC conversations can encourage them to speak up and report their concerns about clinical errors. Staff should similarly report not only actual mistakes, but also near misses and situations in which they perceive there is an elevated risk of error.

The project manager focused on this topic for multiple reasons. First, lower than national top box benchmark scores, otherwise known as the patient perception of care, on Child HCAHPS surveys. Child HCAHPS is a patient satisfaction survey required by the Centers for Medicare and Medicaid Services (the CMS) for all hospitals in the United States; child HCAHPS is directed to children under 21 (HCAHPS, 2018). The survey is composed of 32 questions and 21 patient perspectives of care and patient rating items that encompass nine key domains. This includes, communication with doctors, communication with nurses, responsiveness of hospital staff, pain management, communication about medicines, discharge information, cleanliness of the hospital environment, quietness of the hospital environment, and transition of care (HCAHPS, 2018).

The results were within the domain focusing on attention to safety and comfort which is part of the patient safety domain. The focus area asked parents of children discharged from the hospital to share feedback and understanding of how they would report a mistake in their child's care while in the inpatient setting. The survey item that measured comfort with speaking up about concerns or errors was: Mistakes in your child's health care can include things like giving the wrong medicine or doing the wrong surgery. During this hospital stay, did providers or other hospital staff tell you how to report if you had any concerns about mistakes in your child's health care? The responses are in a 3-point response scale; 1 Yes, definitely, 2 Yes, somewhat, 3 No, (HCAHPS, 2018). Responses that are considered "Top Box" are the responses reported as, 1 Yes, definitely only.

The HCAHPS national benchmark score, or top box score, for this question is a thirty two percent positive response out of one hundred percent. The inpatient acute pediatric care unit where this project was conducted had a score of a twelve percent positive response. This percentile was below the national benchmark rating. In addition, the results in this pediatric unit were lower than benchmark with like-sized organizations.

Available Knowledge

A literature review was completed to identify evidence supporting the project. Various phrases were entered with search terms including: simulation, patient-and family-centered care, partnering with parents, patient safety, communication, reporting mistakes, culture of safety, nursing communication partnership for patients, parents and families for safety. The CINAHL and OVID databases were searched using these terms, returning over thirty two study results results. All studies were identified and critically appraised using the Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) Research Critical Appraisal Tool (Johns Hopkins Hospital/The Johns Hopkins University, 2012). The quality of each study was assessed and evaluated and eight studies were found to be rated a level A and B quality and were given a level of evidence of level II or III. The articles retreived are listed in Appendix A. In addition, a list of modifiable workplace characteristics was listed to divide out opportunities for modificaiton with the top literature refernces and studies found . A literature search of non-research evidence was conducted to support the importance of patient safety and communication as well as the PFCC. One study by Crickmore, (2010) discussed the value of patient- and family-centered care (PFCC) and how it is a healthcare delivery model that aims to enhance partnerships with healthcare providers and patients and families. This study validated study validated relationships

between patient satisfaction and PFCC and provided evidence that nurses play a vital role in this outcome.

PICOT Question

How will simulation-based communication training (I), provided to pediatric nurses in one unit (P), as compared to no training (C), impact 1) the nurses' ability to gain confidence in their communication skills and comfort around difficult conversations with patients, parents, and families about reporting mistakes or safety concerns; and 2) patients, parents, and families comfort reporting safety concerns while in the inpatient acute care unit, between November 2017 through May 2018 (T)?

Critical Appraisal of Evidence

In a 2004 seminal meta-synthesis study focused on patient and family-centered care, crucial links to patient safety were identified in patients residing in a pediatric ward (Ponte, et.al). Care teams in many organizations add value to the practice of family centered care rounds. This is when the interdisciplinary team plans, and schedules rounds or rounding on each patient by going to their room or outside their room as a group, invites the family and encourages them to participate; and has a structured conversation about the patient's care, progress, barriers to discharge, concerns or questions comfort and other topics. By including the family—and in pediatrics, the parents and the patient if old enough--in these rounds, clinicians demonstrated to the family that they are part of the care team and an active member in the plan of care. They included the family by inviting the family member out of the room, leaving the door open and creating a physical circle including the family member in the circle. The circle would be in the room if there were enough space and less people, but the large team may be

intimidating to the child or patient and may not fit in the room. The door is open, the patient invited to participate if applicable, and the family is part of the team.

Implementing safety rounds in the pediatric unit following a negative patient event at the Dana-Farber Cancer Institute increased parent and family awareness of the inherent risks associated with the acute care setting. These safety rounds led to a more proactive approach from caregivers, increasing their reporting, and thus preventing harm (Connor, DeMarco, & Price, 2004). The organization had experienced a poor outcome in the care of a child when medications were given that caused harm and eventually death of the child. After a systematic review by the organization, they found the root cause of the medication error was related to and caused by poor communication between members of the care team, lack of attention to the family concerns, and dismissal of the parents' concerns. The lack of "listening" to the patient and family input and promoting collaboration was found to be the root cause of the treatment error that led to a systems failure. The family input and concerns were not recognized or addressed, and this made a difference in how health care was provided in this case. The family went on to advocate for families speaking up, if a parent or family member shares a concern, do not dismiss them. This parent felt that if the care team listened to her when she said, "my daughter is acting odd, she is thirsty, something is wrong", then her acute deterioration would have been recognized and treated, instead of leading to her death. For all families, this is an example of the importance of the patient and family to be included and being regarded as important partners in safety, and an integral part of the care team.

Similarly, Palokas, Northington, Wilkerson and Boss, (2015) explored staff perceptions and efforts to remove barriers to communication. This study supported the benefits of family and patient participation to improve safety and care, and to dispute assumptions that the inclusion of

families in rounds would take too much time and cause delays. They concluded that patients and families should also be included in rounds, to ensure accurate information is relayed and to ensure involvement in care planning. The investigators were able to show a correlation between positive staff satisfaction scores with incorporating the presence of families in multidisciplinary rounds. This study demonstrated that the additional time spent in rounds due to collaboration was made up later in the day when discharge planning with families in an acute care pediatric ward in a large academic medical center. This was analyzed because the entire team, including the family were already aware of and in agreement with the plan for discharge. Rounds were examined and timed by observers and found to be long, inefficient and not consistent. Family participation was optional and not consistent, families could not explain what the plan after was rounds and were not actively participating. The study used a plan, do, study, act (PDSA) model to restructure rounds, set a standard template, and shared results and perceptions with families. The care team anticipated that actively involving the families would cause rounds to take longer and decrease efficiency. But what they found was that after the reconciliation of the PDSA model created and restructure of the multidisciplinary rounds, the family participation had a positive impact on the participating families, increased efficiency, as assessed by an observer, and increased patient participation in their care. This correlation resulted in patients beginning to actively contribute to treatment goal planning during multidisciplinary rounds in the pediatric unit of an acute care hospital. Having patients contributing to their own treatment goals is important when performing advanced care planning and attempting to prevent harm (Palokas et al., 2015).

In a study by Rosen, et al. (2009), family-centered multidisciplinary rounds were used to present the patient and their diagnosis to the care team. What was unique about the format of these rounds, however, was that the clinical information was being presented by the patient or

family, thus serving as a type of self-introduction. This was shown to promote teamwork and family–patient empowerment. The quasi-experimental design was conducted over a 2-week period. During week one, conventional rounds were conducted. Families provided input via surveys every day and staff were also surveyed, and this data was collected. During week two, all new admits participated in and received family-centered multidisciplinary rounds at the bedside. Again, both families and staff were surveyed. Observers recorded the interactions between families and staff and measured the time required to conduct rounds. The impact on staff satisfaction (according to surveys and verbal comments), as well as the families' perceptions of communication in their care (evidenced through an increase in patient satisfaction scores and verbal communication) was significant. This was shown to promote safe, effective care, improve diagnostic accuracy, and achieve better goal planning within the multidisciplinary pediatric team. Evidence has shown that the early involvement of patients and their families as members of the care team reduces harm, improves safety, and improves patient and family perceptions of nurse communication (Palokas, et al., 2015).

Communication is rarely perfect, and it can fail for several reasons. Understanding more about the various barriers to good communication means that the likelihood of ineffective interpersonal communication and misunderstandings can be reduced. Problems with communication can arise for a number of reasons, including: (a) physical barriers, for example, being unable to see or hear the speaker properly, or language difficulties; (b) emotional barriers, such as not wanting to hear what is being said, or to engage with the topic; or (c) expectations and prejudices that affect what people see and hear. Excellent communication is a learned skill not found in many people (Maguire, & Pitceathly, 2002). Communication is often a point of weakness in clinical settings that can cause safety risks, poor outcomes, readmissions, and

contribute to patient and family confusion (Institute of Medicine, 2013). Through simulation and debriefings, care teams can improve safety and move towards improved care planning by showing participants how to avoid events by exposing gaps in processes during usual routines (Duffy et al., 2004). Coordination with families is imperative. Moreover, as health care changes and moves much care to the home or outpatient setting, it is becoming increasingly important to ensure that families, parents, and patients understand their role in the health care process. This will empower them to understand the importance of being aware of any concerns in process, regardless of the setting, to ensure safety is priority. According to the Institute of Medicine (2000) report *To Err is Human*, health care workers should aim to promote partnerships in care with their patients.

Rationale

There is significance to clear communication in relation to a culture of safety. Caregivers who are confident in their communication with patients have better conversations around more difficult topics such as reporting a mistake and family concerns around care. Family and patient partnerships and communication are essential to ensure a culture of safety in the acute care setting and in any setting where care is provided. One way this can be assured is for the nurses to validate that families and patients know how to speak up if they are concerned about a mistake. Not all nurses are gifted with excellent communication skills, or skills in communicating difficult topics with their patients.

Specific Aims

The specific aim of this project was to enhance critical communication between patients, families, parents, and the care team; and to prevent harm by enhancing the nurses' ability to coordinate the plan of care and to communicate effectively. This project was based on the concept that early involvement results in improved care and increased communication, which in turn leads to improved team safety. The significance of the nursing problem is profound; caregivers recognize the impact of communication on families, and how the early involvement of families in clinical decision making, bedside care, and discharge planning has a major impact in terms of harm reduction, improved safety, and communication. As indicated by the literature review, family and patient involvement in care, and having clear goals for the care team are critical to keeping the patient safe; and ensuring the family is aware of how to promote safety, and able to actively participate. It has also been found that the care team’s skill around use of clear communication pathways with patients and families can encourage nurses to be greater advocates for the patient and their family (Palokas, et al., 2015). This project was aimed at

utilizing this knowledge and gain confidence through structured training with care team members to develop their ability to have open communication conversations (CSC) with families and patients.

HCAHPS is a patient satisfaction survey required by the Centers for Medicare and Medicaid Services for all hospitals in the United States. In the acute care unit where the nurses participating in this study work, the current baseline for communication is currently at 8% positive rating the hospital either a nine or 10 out of 10 in communication, and only 30% positive rating the hospital 9 or 10 out of 10 in the ability to explain things in a way that patients and families can understand. Communication failures and not understanding communication between the nurses, healthcare team and the patient can be a leading cause of harm (Thomas and Galla 2003).

To improve both measures and create confidence in nurses having CSC conversations and clearly communicate as well as verify understanding from patients and families, an intervention was created and that is the foundation for this project. Reviewing the low scores in these two areas mentions previously from the HCAHPS survey led to conversations with nurses and the identification in the gap in confidence was determines. This project is based around the HCAHPS question concerned with parents' perceptions of their ability to speak up about mistakes. Patient and families perceiving that they could speak up about safety concerns or mistakes in the hospital is a core part of a safety culture. The NRC Picker HCAHPS questionnaire includes a dimension dealing with error reporting by providers. The actual question can be confusing to families and may require caregivers to explain the purpose of the question and why the survey is asking families if they felt comfortable reporting things that do not appear

right or that concern them about their child's care. The question that is directly presented to parents of discharged children reads as follows:

> Mistakes in your child's health care can include things like giving the wrong medicine or doing the wrong surgery. During this hospital stay, did providers or other hospital staff tell you how to report if you had any concerns about mistakes in your child's health care? (NRC, 2017).

Conceptual Framework: General Systems Theory

Ludwig von Bertalanffy (1901–1972) was the first to recognize the general systems theory from which many subsequent nursing systems theories have developed (Drack & Pouvreau, 2015). Ludwig von Bertalanffy was a key figure in the advancement of theories. His early considerations led him to recognize the necessity of considering the organism as a system, as an organization of parts and processes.

General systems theory may be a specialization of systems thinking and a generalization of systems science. General systems theory is a general science of *wholeness*. The parts of a system have functional and structural relationships between each other, and many other routines function in the same way.

Using systems theory as a nursing conceptual framework, it is thought that *team communication and learning* is a product of the sum of the parts of multidisciplinary team thinking (Drack and Pouvreau, 2015). Skyttner later constructed a systems theory, that was developed using systems theory as a framework to move from one stage in a system into the next, by passing through each stage one at a time (Drack & Pouvreau, 2015). By including patients, parents, and families as part of the whole system, learning is enhanced by providing

additional aspects to the communication framework to identify what is important to them. Team communication can fail whan any part of the team is excluded from the system.

This framework applies to the situation as pediatric nurses first gain confidence and skills in communication through simulation. Then these nurses apply this new knowledge to daily situations with families and parents. Moving from one stage as learner with lack of skill, to practicing CSC conversations on a daily (or more often) basis, then allows them to share the knowledge with others. Clear communication with confidence allows the pediatric nurses to use skills gained to speak up and encourage patients and families to speak up as well about concerns and or safety issues. Including the clear communication and CSC in daily practice, demonstrates the nurse's ability to pass through the stages of systems theory one at a time.

Section III: Methods

Context

Cedar-Sinai pediatric department and the organization names safety as part of the mission of the health system. The organization is prouud of the safety efforts and the results from various quality projects and programs. This simulation training was focused on improving communication between nurses, patients, and their families to increase the nurses' confidence in clear communication with patients and families and gain their confidence in their ability to speak up and to report concerns or mistakes. As found in Appendix B, a pre-and post-survey was administered to thirty five participants of the pediatric nursing staff in an acute care pediatric care unit in a large academic medical center. The survey was created in a program called Qualtrics, had 21 questions and included qualative and quantitive questions. This was done to measure their comfort as well as their self-perceptions of skills when communicating with families, parents, and patients. These staff were chosen due to the nursing staff unit, patient

population, and convenience sample by the nurse director. The staff had a baseline understanding of simulaiton as it is used with advanced life support training. The staff had expressed concerns around their ability and comfort to have difficult conversations with patients, parents and families, namley about mistakes. The confidence improved by having the opportunity to simulate these conversations in a safe environment. Simulation center training was utilized to provide a non-threatening environment for the nursing staff to learn and to develop their confidence around parent, family, and patient communication. According to the (SSH) Society for Simulation in Healthcare, simulation training has been recognized as an effective method to teach, allow for return demonstration and train nurses on various sills and tactics. Many nurses feel that conversations about mistakes are difficult conversations. The project manager had discussed the need to talk to patietns about a mistake and also rounded with staff when they had to report a mistake to a family. Many nurses stated this was uncomfortable, made them feel like they lost the trust of the families and that they were embarassed. Simulated conversations, with the opportunity to receive feedback and gain confidence, increase opportunities for nursing team members, families, and patients to report their concerns, near misses and mistakes, to prevent harm and have their voices recognized (2016).

In a controlled environment, 33 participating pediatric nurses were provided with scenarios involving parents and children and the use of tactical nursing skills (e.g., IV insertion). The nurses participating also were given a script that prompted them to communicate issues and address concerns about safety with a family during an interactive conversation about the patient condition with the parent who was a patient and family centered care council parent who had been trained as a standardized actor. A sample of this script and standardized scenario is found in Appendix C. The scenarios were built off the templates found on the California Simulation

Alliance (CSA) website. The CSA allows those who wish to explore use of simulation to share best practices and tools. There is a greater movement to include simulation in education (Caifornia Simulation Alliance, 2016) throughout nursing and this project hopes to add a simulation template for others to use. Nurses participating in these simulated conversations needed to exhibit active listening skills to be successful. Following training and education, all parties were required to undergo debriefing after each session. These debriefing sessions provided a context with which to discuss issues around perceptions, comfort, and the importance of the nurse–family partnership. Participants were asked to complete an electronic self-evaluation survey of their confidence and skills. This Qualtrix survey (Appendix B) was given to the nurses before the simulation scenarios and again after the debriefing. The nurses participating in the training evaluated their own perceptions of their abilities as well as their confidence in their ability to communicate.

Intervention

This project was three pronged, it sought to improve the confidence in the pediatric nurses when having difficult conversations about mistakes. It also aimed to increase nurses awareness of reporting mistakes and the value of reporting near miss events or close calls that do not cause harm to the patient but identify a process that places the patient at risk. The project also hoped to raise the patient perception of care though the HCAHPS survey that is given post discharge to parents and patients via mail. The specific goal of this project was to produce a summary of outcomes returned via nurse feedback survey and through the evaluation of HCAHPS scores for improvement after simulation center training with nurses from the pediatric inpatient department. This was developed by the project manager when evaluating different options for training nurses in an innovative way. The aim of the project was also to produce a

summary of measures desired to change, tactics that will be taken and risks associated. Additionally, this project aimed to determine the impact of this training on conversations and safety event reporting. One outcome measure was to evaluate the number of near misses reported after the training to evaluate if this number increased, to demonstrate increased awareness of the importance to report near misses in addition to actual events.

The project goal was to improve nurses' comfort and skill addressing safety issues and patients/parents/families comfort in speaking up as measured on the HCAHPS survey. This project also sought to investigate the use of simulation as an educational methodology to improve communication and confidence in the pediatric nursing staff. In addition, the project aimed to improve nurse confidence when having conversations with parents, patients, and families about reporting mistakes. Baseline data was gathered on the current HCAHPS results and was trended over the time monitoring and completing the project for comparison (Appendix F).

Setting

The target population for this project included all the current pediatric nurses from all shifts who are assigned to work in a 32-bed pediatric inpatient unit at an urban academic medical center. The current state is a low average daily census of 5 patients as compared to the budgets census of 9 patients. The nurses consist of 50% staff with less than 3 years' experience while the tenure for those over 3 years' experience averages 13 years. This unit has fewer than average adverse events, minimal harm reported, however the feedback from the patient engagement and patient satisfaction survey (HCAHPS) has returned data indicating that the patients and families leaving this unit lack communication with the care team, and the nurses did not explain things in a way that parents could understand. In addition, the ability to report a mistake in "your child's

health, is one of the lowest scoring outcome measures reported in this unit. The nurses verbally indicated that they would be willing to participate voluntarily in the project and were open and receptive to change. Participation was accommodated, encouraged, and was voluntary. It also ensured respect to all ethical considerations and privacy was maintained by commitment by the project manager to keep identification of participant responses confidential. In order offset any ethical concerns, participants were reminded that they had the ability to opt out and that their participation was entirely voluntary. For those nurses who participated, they were given protected time to participate in the training.

Gap Analysis

A gap analysis was completed to identify the needs of the project and brought to light several potential barriers to success. the gap analysis outlined the desired state, of pediatric nurse caregivers ability and confidence in having ioen communication with patients and families. The gap in the current state was found to have a limited amount of resources and no available training on these conversations. The outcome goal was then developed to create and implement a training program to meet this need and to include patient and family members in the training to allow feedback and enhance the solution.

Project Timeline

A Gantt chart was used to monitor the progress of the project, including key events, milestones, and progress, see Appendix E. This Gantt chart not only provides an overview of the project's timeline, but also allows for any changes in the needs of the project to be anticipated in advance. Key milestones were identified and modified when met or were adjusted as indicated.

Work Breakdown Structure

A Work Breakdown Structure (Appendix F) was used to identify the key responsibilities for each party. In the work breakdown, the project manager was responsabile for the majority of the set up of the simulation program, the survey, gathering data and supporting scenarios, arranging facilities, arranging the standardized actor participants and facilitated the gathering and summarized the data and results.

Responsibility/Communication Matrix

A responsability matrix was created in order to list out the project managers' key milestones as well as the communication plan with the committee and key stakeholders. Identification of who needed to be notified and kept up to date was part of this work and also the expectaitons of each participant in the project (Appendix G). Baseline HCAHPS scores, obtained from patients discharged from the pediatric unit in the before, during and after the simulation training through quarters 1-4 in Fiscal Year 2018 were reviewed (Appendix F).

After the simulation was completed, staff participated in a structured debriefing as outlined in templates obtained from the CSA site. The nurses were debriefed immediately after simulation as a group with the trained simulation specialist and the pediatric clinical nurse specialist (CNS) in a private room. Nurses then viewed videos of themselves during the simulation and open feedback was shared. All participants agreed to filming and the videos were destroyed after simulation. The nurse’s response to being videotaped ranged with comments from two participants such as “oh no look at me I hate to see myself on video” to “I like to see myself because I didn’t know I say that (Um) so much and I am too quiet". The nurses shared their feelings in the debriefing and perceptions along with the parent council members and volunteers. The parent council volunteers who participated as actors in the simulation, were trained as standardized patients through a course from the simulation center, to remove any

personal bias or variation. The nurse was asked to complete a survey about their confidence and comfort with conversations practiced during the simulation before and after the simulation training. The surveys were provided electronically, were voluntary, and privacy was given to take the survey anonymously, via iPad response input in a separate room, outside of the simulation center. Nurses were asked to rate their level of comfort and confidence after the intervention to determine if it was beneficial to them.

Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

To address this nursing problem, all nurses who work in the pediatric acute care unit on any shift and with any number of years of experience were identified as a focus due to their specialty unit of pediatrics and the patient, parent and family partnership role in their usual duties. The Strengths, Weaknesses, Opportunities, and Threats analysis tool (SWOT) found in Appendix E, was used to explore the optimal situation, in which nurses confidently had conversations with families about safety and felt confident. In comparison, the current state was that these difficult CSC conversations were not happening, and nurses were reporting a lack of confidence in their ability to speak to the same topics, and lastly, the SWOT analysis was used to identify what tools were required to change practice to meet the ideal state. The key findings in the SWOT analysis were placed into four quadrants to raise awareness of potential threats to the project. One threat was that the simulation center training may be altered if patients' needs change in the unit, requiring staff to work in the clinical department. The training may also be at risk with varied focus or intent of attendance of the staff; some nurses stated that they were uncomfortable with parents participating in the simulation and some nurses stated that they were nervous with videotaping. Leadership commitment was also required to complete the training. Reporting quantitative results about actual events reported in the organizational event reporting

system may become difficult if the product used to report mistakes (currently this is the MIDAS reporting system) changes, if the categories are changed, or the issue reported is attributed to another department. In the pediatric acute care unit, the HCAHPS Reports often return results in very low numbers (n) of surveys returned. The average return rate as compared to surveys sent is averaged at six percent. The average return rate in all age ranges including adults is thirty two percent and national standard response return rate is thirty six perent. This may limit data collection from this source and or feedback mechanism. The HCAHPS survey feedback can be valuable and beneficial if the feedback received from discharged patients and families report an increase in the key areas that this project aims to improve; (a) reporting mistakes about your child's health, (b) participants reported an increase in their comfort in having conversations with families (c) communication with patients, families children, teens and adults, caregivers explained things in a way that I can understand (NRC Health, 2017).

Return on Investment Plan

Based on recent reports, approximately 200,000 Americans die from preventable medical errors including facility-acquired conditions, and millions may experience errors (Andel, 2012). In 2008, medical errors cost the United States $19.5 billion. About 87 percent or $17 billion were directly associated with additional medical cost, including: ancillary services, prescription drug services, and inpatient and outpatient care, according to a study sponsored by the Society for Actuaries and conducted by Milliman in 2010 (Andel, 2012)

The 1998 Institute of Medicine's (IOM) report estimated 98,000 deaths due to preventable medical errors annually in the landmark report that shocked the medical community (Griner and Knebel, 2003). The estimate in that report suggested an average of ten lost years of life at $75,000 to $100,000 per year, there is a loss of $73.5 billion to $98 billion due to cost of

those deaths (Institute of Medicine, 20000. A recent Health Affairs article stated that preventable death is ten times the IOM estimate-the cost is $735 billion to $980 billion (Andel, 2012). Quality care is less expensive care. It is better, more efficient, and by definition, less wasteful. It is the right care, at the right time, every time. It should mean that far fewer patients are harmed or injured (AHRQ, 2017).).

The evidence shows that training nurses to recognize and communicate mistakes increases confidence, communication skills and patient outcomes. If this training reduces the risk of error by even ten percent of errors/annually one could project a savings of $7,500 to $10,000 per year minimally. In the acute care unit where the nurses participated in this survey work, the average length of stay is 4.5 days. When harm is done, or an error is made, the average length of stay is increased by 4 days on average totaling 8.5 days accordig to the Cedars-Sinai pediatric unit medical records department averages and financial reports. The average billed cost per day in the pediatric acute care ward is $7,800 and $13,500 in the pediatric intensive care unit. The difference in cost would double that amount increasing the cost on average for one error that prolonged the patients stay by 50% or costing the organization an additional $7000 on average. With an average prolonged length of stay of 4 days due to error or harm, and with a total of 64 errors that reached the patient but 4 that caused harm to increase length of stay, one can state that this cost the organization $7000 time 4 occurrences on average of 4 days or $28,000 in one year (Andel, 2012).

Responsibility/Communication Matrix

The plan for communication for this DNP project included many touchpoints and responsibilities for each role to ensure progress and clear communication. This is outlined in Appendix K and went as planned throughout the project. The project manager communicated

with key stakeholders in the organization, provided reports as indicated, and directed and stayed on track with the University of San Francisco (USF) faculty and leadership. Examples of collected responses were reviewed, discussed, and shared for communication and distribution. Individual permission to take the survey as well as to record, then destroy, the simulation video during the debriefing was obtained from all participants. Five participants signed a photo release for photographs of the set up in preparation for the debriefing and future presentations of this project. The families who participated in the simulation received feedback and shared valuable insights as well. The results of this simulation as well as the pre- and post-simulation survey results were shared later with all participants and an open forum was offered to provide additional feedback and or ask any questions.

Stakeholders

The key stakeholders for this project were the Chief Nurse Executive (CNE), the executive director of women's and children's services, the quality improvement team, the leadership team in pediatrics (including the associate director), assistant nurse manager, members of the patient and family-centered care council (PFCC), the DNP student's chair and committee, and the simulation center director. The communication matrix is found below in Appendix K and a work breakdown structure is listed in Appendix H. A statement of non-research was developed and submitted to the project managers organization (Appendix L) and was processed through the processes required by the organization as well as by the University of San Francisco. The Chief Nursing Executive (CNE) and I had discussions routinely this quality improvement project and the feedback was supportive, as the intent and purpose were in alignment with the vision of the organization. She also committed to the leadership team allotted project time and support of this project (Appendix M). In addition, the project was also aligned with the goal of the organization

to create a culture of safety, as expressed and supported by the Chief Patient Safety Officer. The simulation center was supportive of the project and was willing to assist. The PFCCC also reported finding great value in the opportunity to participate in the simulation involving families and parents.

Study of Interventions

The approach used in this project was use of the PDSA (Plan do Study Act) and IHI (institute for healthcare improvement) models. Participants included a pediatric educator, nurse director who is also the project manager, an assistant nurse manager, pediatric nurses and the simulation center coordinator. There were thirty three pediatric nurses with clinical experience ranging from one to thirty five years participated and were surveyed before and after the simulation training to evaluate their increase in confidence and other feedback about the simulation benefit to improve the culture of safety and outcomes in the pediatric unit. Of the nurses participating, twenty four percetn had none to two years' experience, twenty nine percent had 2-5 years' experience, thirteen percent had 5-10 years' experience, eighteen percent had 10-20 years' experience and sixteen percent have had over 20 years of experience (Appendix N). The nurses were able to self-rate their ability and comfort with safety conversations with families, patients, and parents around safety partnerships (Appendix O). Simulation training was provided in small groups, taught by the project manager and the Pediatric clinical nurse educator) who is trained as a simulation educator. The nurses were placed in groups of four or five nurses and were selected by availability on the schedule. The training focused on skills, communication tactics, safety concerns, monitoring body language cues, active listening, and family communication. The simulation training was created based on a sample from the

California Simulation Alliance (2016) and was created based in part off an actual experience that occurred in the project manager's career.

The experience that was used for scenario was an error that occurred at another facility in a two year-old child. An error occurred, the child survived but the stay was extended, the emotional and financial toll on the patient and the family was underestimated and the care team could have easily prevented additional harm, if they had listened carefully to the parents, explained things in a way that the family could understand and asked the parents to report concerns or mistakes. Respect for dignity of the family also was lacking, causing a lack of ability to feel listened to, and thus preventing harm to the patient. This was one of the scenarios that was used to create the scenario used for the simulation, in addition to other recent events in the 4NE pediatric acute care unit.

In this scenario, the concerned parent kept asking the nurses "why does the IV look like that"? "My child is not acting right" and was routinely dismissed. The parents also were not allowed to see the medical record and were treated poorly for questioning the nurses and the care. The family was under investigation for harm to this child and was not treated ethically. The child suffered a traumatic incident and after being admitted, experienced complications from a central line infiltrate and other deterioration. This not only extended the stay in the hospital, cost the organization time and money, but also made a lasting impact in the lives and perception of the healthcare industry to this family.

The project manager unitlized experiences as a parent who experienced this first hand and vowed to prevent this type of experience from happening again in any unit or department that they oversee. In addition, there have been events in the pediatric unit that the project manager oversees that also added to the simulation, and created a likley situation that could

occur in the unit where the simulation was conducted. The data returned is that this still occurs and an impact that the project manager can have was to greater train the nurses caring for patients in the pediatric unit to ensure confidence and importance in clear communication with parents about safety.

The training was marketed as pediatric nurse training about starting an IV and pain modalities (Appendix P). The didactic classes discussed the tactics and options for discussions around starting an IV, increasing comfort and and introduced a communication tool called the Poke Plan (Appendix Q). The purpose of the poke plan is to collaborate with parents and families around pediatric labratory draws and intraveneous (IV) sticks and create a care plan for this event and ensure all are aware of what works best for pediatric patients in this situation. Lab draws and IV starts can be painful procedures and can be difficult for parents and family members to witness. The University of Michigan C.S. Mott Children's Hospital developed a plan called the Poke Plan to collaborate with patients, parents, and families to improve the patient experience regarding these painful procedures. Cedars-Sinai Medical Center (CSMC) has adapted the Poke Plan for Cedars and the care team of pediatrics initiated utilization of this tool after simulation training to improve the patient experience for painful procedures.

Additional discussions occurred around the importance of communication in relation to reporting mistakes and a culture of safety, with this discussion being based on information presented by the Institute for Healthcare Improvement. As demonstrated in the scenario in Appendix C, the training prompted the pediatric nurses to introduce themselves to the patient and family, provide an overview of the planned procedure and start an IV on a child. The simulation coordinator and facilitator will share with the nurse and the parent volunteer that an error or a mistake in care occurred, requiring this information to be communicated to the family and a

conversation to be had between the parent and the nurse. The parent volunteers were prompted to speak up about concerns and the nurse needed to respond to this questioning and ensure a safe environment was present and thank the parent or family for raising concerns and share how important this is to the patient and to the nurse. The family and nurses needed to communicate effectively without judgement to be successful. Perceptions in care were discussed in debriefing and the PFCCC parents who participated in the training provided their feedback on how well the nurses communicated with them and provided feedback about the many things that may have deterred them from speaking up about concerns or mistakes. Honest, non-judgmental conversations were had during the protected debriefing, which was ensured by the facilitator laying round rules and all participants understanding that the feedback in this room to gain additional knowledge about perceptions and share what would have been said or done differently. For the PFCC parents who participated in the program and simulation, they were provided with training regarding their role in simulation as a standardized patient through the simulation center to improve consistency and remove any personal bias. There was a total of three PFCC volunteers due to time commitments and all were trained in a consistent manner. These parents were chosen after a request for assistance in this training was sent to the parent council and volunteers responded. Two primary parents participated in most of the scenarios and two back up parents participated. All parent volunteers were members of the PFCC council, official hospital volunteers and had either had a patient in this acute are pediatric unit or had a child in another pediatric unit. An outline and summary of the training plan was provided (Appendix C).

Outcome Measures

As an outcome measure, staff participating in the simulation training were asked to report any improvement in their confidence and their ability to have conversations with families as partners in their child's care. This was done through a pre and post simulation survey (Appendix O and P). A goal that was met almost immediately after training was that 100% of staff who participated would report improvements in their ability and confidence to have difficult conversations with parents 33 out of 33 reported an increase in their comfort in having difficult conversations with families (Appendix O). Staff were asked "how important" is it to partner with patients, parents and families for safety. This was compared before and after the simulation (Appendix Q). Participating nurses were also asked to report if they had a personal experience as a patient or family member, where they can recall feeling that there was a lack of communication. This is exhibited in Appendix R and 60% of participants stated that they had been in this situation. Nurses were asked about their increased their knowledge and confidence after the simulations with PFCC members in a non-threatening setting after the simulation. Nursing staff had the opportunity to provide qualitative data and comments on what the impact of the training was and provided feedback about how they would change their practice. They also were asked what other skills they would need or want to learn to improve in this area of practice (Appendix S). A graphical representation of the perception of importance in partnership with families is found in Appendix T. Both comments, and qualitative feedback were summarized and shared with stakeholders in the organization and are listed in (Appendix U). The feedback gathered was from the simulation and summarized how the nurses felt this project simulation to improved their communication skills. Also, feedback was received about other skills the participants felt that they gained during this simulation (Appendix V). Nurse participants, parents, and the PFCC standardized actors provided input into how to incorporate family

presence, as well as patient and parent voices in future simulations. Pre- and post-simulation surveys were provided to staff using Qualtrics online surveys. The qualitative data was also being obtained through this survey. This survey instrument is available in Appendix B.

Analysis

The outcome measures included qualitative and quantitative data and can be used to draw inferences from the data. This data is based on the feedback received from the Qualtrics surveys used to evaluate the caregivers' self-assessment of their confidence in their ability to communicate with families in the clinical setting. The feedback from staff via the survey described how the training impacted their future practice. This data and feedback was gathered, correlated, and presented to the staff as well as the family council to inform nurses and future simulation leaders about the benefit and key aspects of the training by summarizing the Qualtrics data and presenting this in graphical format at staff meetings and family council meetings (Appendix F). The goal was to show the impact and importance of active participation from families, patients, and parents. Nurses who participated gained both confidence and comfort in their ability to have conversations with patients, parents and families. We asked nurses how comfortable they were speaking with parents and families about a mistake or a concern. Pre-simulation, only 15% of the nurses felt extremely comfortable, 57% felt somewhat comfortable, 12% felt neither comfortable or uncomfortable, 12% felt somewhat uncomfortable and 3% felt extremely uncomfortable.

After the intervention and simulation training with the same nurses, the results improved, and the staff reported increased comfort and confidence in this important part of communication. Post-Simulation, 52% of nurses felt extremely comfortable, 48% somewhat comfortable, and 0% of the nurses felt neither comfortable or uncomfortable, somewhat uncomfortable or extremely

uncomfortable. This was a huge win and improvement in their comfort due to this quality improvement intervention. After simulation we had 100% comfort in report that they were comfortable (Extremely or somewhat) with these conversations as compared to 72% prior to the simulation training intervention. In addition, none were neutral or uncomfortable compared to 27% prior to the project (Appendix O).

Evaluation tools in the form of a survey was used to gain insight into nurses' confidence with being vulnerable around parents and families, and the caregiver's ability to discuss safety and mistake reporting. Input from all participants was obtained to provide feedback on the development of a tool that that could be used in future simulations to incorporate patient and family voices in other communication scenarios. Reports of actual mistakes, as well as near misses, and safety concerns will be monitored to identify any trends in preventative or near miss reporting, revealing the importance of nurses and patients speaking up (OHSA, n.d.). A downward trend was anticipated in actual events. If more near misses are caught and systems changed; therefore, actual events were expected to decrease. As demonstrated in Appendix W, this data has continued to be reported monthly at shared governance committee meeting to ensure participation from all staff members and the multidisciplinary team, thus focusing on possible changes and improvements to improve processes, reduce harm, and to reinforce a culture of safety. This table (Appendix W) shows three units, 4NE- pediatrics is the unit where the intervention occurred, comparison units were included, 4NW- adult unit and PICU pediatric ICU. The units became involved due to the role of the project manager and units that they oversee.

The unit where the intervention occurred was in the 4NE pediatric unit. The other two units, 4NW was an adult unit and PICU is a unit also housing pediatric patients, however this staff did not receive training. The 4Ne nurses do float to the PICU as needed.

In appendix W there is a table listing three untis and is titled level of harm. This is the is a LEVEL of harm not actual harm. The number of near miss events reported in the control group (4NW) were lower than the number of near miss events reported in pediatrics 4 NE. The pediatric population is housed in both pediatrics 4NE and PICU 4 NW.

The table shows that as compared to three percent pre-intervention reporting of Near misses or close call events in the system, post simulation and intervention the results increased. Staff felt more comfortable reporting near misses or close calls in the units. Pediatrics 4NE from three percent to thirty seven percent (67/125 reports) were now reporting near misses that in the past, prior to intervention, were underreported and the value was not understood. This increase demonstrates a recognition by the nursing staff to report mistakes and speak up about close calls to prevent actual harm in future cases. This is a significant change and impact of the project intervention on quality.

Ethical Considerations

Staff participated in the survey and simulation training voluntarily after having been provided with a comprehensive understanding of the goals of the study: to improve practice and to provide them with tools to enhance their own abilities. There was a clear understanding that participants were participating to gain knowledge and confidence and were not participating simply for being tested. Some precautions were arranged in advance to ensure that participants did not feel coerced or worried about the impact of their answers; these precautions included the project manager keeping all surveys unbiased and discreet. The data was not evaluated until after

all training had been completed. The surveys were completely anonymously and did not contain any identifying information. The online survey also contained a click option— "I decline"— before completing the survey.

There was a great need for participants to be honest in their self-assessment about their skills and abilities around communications and their confidence in speaking with patients, parents, and families. The role of the parents and families from the PFCCC council participating in the simulation was discussed with the participants before the training in the simulation center. Parents participating in the simulations were unpaid as they were official hospital volunteers; nonetheless, it was made clear that their participation was greatly appreciated.

One potential conflict, however, concerns the potential for bias in the simulation from PFCC parents and family council members based on their previous personal experiences. To prevent possible bias, the project manager and the simulation center provided training to the actors (i.e., PFCC parents) to discuss and remove any potential conflicts, thus ensuring that they understood their role and purpose in the simulation. They were given a biography of the patient and a script; however, they were requested ask questions to the nurse about the care that was being provided just as they would in a real situation.

There was no actual patient information used nor researched in this simulation. This practice improvement project was in alignment with Jesuit values and the American Nurses Association Ethical Standards. There are six leadership values, known as the Principles of the Jesuits. *Magis*: meaning "more." This is the challenge to strive for excellence, such as this training that aimed to improve excellence in care. The second value is women and men for and with others to share gifts, pursue justice, and have concern for the poor and marginalized. Caring for patients in the hospital and providing just care by acting as the nurse for patients and their

families together. The third value is *cura personalis* or to care for the patient as an individual. Fourth, the unity of heart, the mind, and the soul are for the holistic needs of the person and family. This training challenges nurses to care for the family unit, thus strongly supporting this value. Fifth, is the *ad marjoram dei glorium*, for the greater glory of God. Lastly, the sixth Jesuit value is the form and education agent for change. Teaching other behaviors that reflect critical thought and to act morally and responsibility towards ethical issues (USF, 2017). This simulation was based on this sixth value as pediatric nurses are focusing on the good of the family unit and taking the right action on behalf of their patient.

This project was undertaken as an Evidence-based change of practice project at Cedars-Sinai Medical Center and as such was not formally supervised by the Institutional Review Board. An IRB was not used after an assessment and review by the internal IRB board and determination that this is a quality improvement project.

Section IV: Financial

Financial Plan

The budget of $17,413 was the estimated cost of the project and was reconciled at the end of the project, which came in under budget by $2,435.00. The work breakdown structure aligned the project manager tasks with the project deliverables. It was imperative that the project manager executed the project along with other duties and provided key stakeholders with updates in a timely manner with the outlined goals. The project manager was asked to do additional work as not to employ or place additional responsibilities on others. The project manager and the Clinical Nurse Specialist (CNS) from the acute care pediatric unit ran all the simulation exercises, recruited and trained family members who were volunteers, purchased any food or recognition for participant volunteers, and maintained their formal positions in the unit. The total time spent was accounted for in the budget table in Appendix J and was totaled at 403 hours for the project managers time.

This project's results were shared with the parent council members, staff who participated, leadership and the research department of the organization. In addition, the results were shared with the Magnet surveyors duing a recent visit and the unit was commendaed as an exmplar. On average, it costs about $401 per nurse per day to participate in simulation exercise. This would include the salary of the nurse at the average rate of $360 for an 8-hour shift or $45 per hour. $16 each for the facility use, $15 for food and supplies and $10 for certificates and average parking costs. After training 33 nurses, this totals to $13,266.00 for the training costs. Not included is the time for parent volunteers as they are volunteering their time. The cost of a gift card for them as a thank you is included in the supply costs. Also, not included is the cost for the project manager and the nurse educator as they are exempt staff, and this is part of their daily work and expected

to adjust other work accordingly. In Summary, it costs $401 on average to train pediatric acute care nurses in a four hour training course and four hour debreifing or follow up session.

Risks/ Barriers

There were some potential risks or barriers to the implementation of this project that may have resulted in the need to pull the project manager or the nurses participating in the simulation from the training. A plan was put into place in the event this might occur, and it did—there was a make-up day scheduled. This also occurred during the planning phase of the project as the simulation center ran into some scheduling conflicts. Consequently, it was necessary to reschedule simulation center booking dates and nurse's schedules also had to be reorganized to accommodate their ability to participate. Moreover, to address the needs of the project manager who was pulled out of training, a backup administrator for simulation, the pediatric nurse educator was called upon to complete the training. There were mistakes made during this project and changes made to the number of education hours per nurse permitted and the support of this training. Support and oganizational priorities changed and there were barriers to overcome when the budgeted hours of time for each pediatric nurse was reduced from 4 hours for this training to 1. The barrier was overcome by the exempt team working clinical shifts to meet budget. In addition, the tool used to collect HCAHPS surveys, a paper tool sent after discharge, was later halted after the project. This was replaced by an email or phone survey but the questions around child specific questions were not sent out. This will limit the ability for the project manager to evaluate this projet and the ongoing outcomes after the completion and moving into the next fiscal year. In addition, the financial review found this training to be cost effective (Appendix J). To negate this risk, the training start date was expedited, and a financial commitment was made.

Other limitations included: small number of nurses (i.e., limited sample size), one area of clinical practice, limited time, changes in organizational goals, and financial constraints.

Section V: Results

Results

In health care, we hold information about people's lives in our hands. At times, there needs to be difficult conversations with patients, staff, families, and parents about clinical information or observations, and these conversations can be challenging to share. When those who we care for feel comfortable with their care team and their environment, and can speak up about their concerns, they allow for more information sharing and create a culture in which concerns are addressed, acknowledged, and respected. This prevents harm by helping to identify risky situations in advance, preventing harm, and possibly deaths in some cases. Communication is key, but without proper training and the opportunity to practice, caregivers may not all have the same abilities; therefore, they can benefit from training in a non-threatening environment. The benefit of creating a program that others can use in the future to include the voice of the patient and their family, as a long-term benefit, this project was able to show that beneficence and justification for future use.

Conclusions

In summary, this project was a quality improvement project that focused on how nurses can gain confidence in their ability to effectively communicate with the patient and family unit to support the clear communication of goals and the reporting of concerns. The goal was for the nurses to report back about their use of skills and improved confidence, as well as to increase the reporting of near miss events. The initial short-term goal was to have 100% participation from

the assigned pediatric nurses in the survey, and to receive verbal feedback from the nurses that could be used to facilitate a deeper understanding and recognition of the impact of effective communication. The long-term goals of this project include the increased perception of the importance of family partnerships to improve communication and safety. Another long-term goal was to increase the pediatric nurses reporting of confidence in their skills around effective communication and conversations with families about mistakes and reporting concerns.

The short and long-term goals included the ability to gain confidence in one's ability to communicate with families and to see them as integral partners in care by implementing training and performing re-evaluations on the impact in practice. This goal was met as demonstrated in (Appendix O). Pre-intervention, the pediatric nurses reported 73% being extremely comfortable (5/33) or somewhat comfortable (19/33) when having conversations with families and parents around reporting mistakes. After the intervention, 100% of the nurses reporting being extremely comfortable (17/33) or somewhat comfortable (16/33) with the same conversations. This was a 75% increase in comfort. The jump from five out of thirty-three nurses reporting extreme comfort (15%) to 17 out of 33 post simulation (51%) reporting extreme comfort was profound and this 80% increase was proof that the nurses gained confidence and comfort with these simulation training.

The project manager's goal was that this project would lead to improved communication practices in staff, both immediately and in the long term, as indicated by repeat surveys and verbal communication. The long-term goal of improvements in HCAHPS scores focusing on mistake reporting by families would be an indicator that the conversations with the families has been taking place, and the perception of nurses' improvement in communication could also be measured by way of the HCAHPS scores. As shown in Appendix F, over four quarters, the

responses increased. The intervention and simulation occurred during the second and third quarters of Fiscal Year 2018. The results for each domain increased tremendously.

Parent HCAHPS reporting results demonstrated an improvement in many areas. Clear communication with child communication went from eight percent (8%) in the first quarter, thirty percent (30%) in the second quarter then the intervention occurred.

In quarter three the rate was sixty percent (60%) and in quarter four, ninety percent (90%). The percent reported is per the HCAHPS survey resulting the percentage of responses that were listed as nine or ten on a scale of one to ten with ten being the highest ranking for each item,

Teen communication improved over four quarters from fourteen percent in the first quarter, to twenty percent in the second quarter when then intervention occurred, forty percent in quarter three and finally eighty percent in quarter four.

Adult or parent communication was reported at 1% in quarter 1, 205 in quarter 2, intervention occurred, then quarter 3 40% and 88% in quarter 4.

Lastly, responses from HCAHPS surveys that asks parents after discharge, how well the caregivers and nurses explained things in a way that you could understand increased as well. Over 4 quarters, the responses increase from quarter 1 at 30% to quarter 2 at 45%, quarter 50% and finally quarter 4 at 87%.

Each dimension increased over 4 quarters and as presented in Appendix F, the trend upward is shared with stakeholders and staff to continue to ask what is working and how have you changed how you communicate?

Another goal associated with this project was the development of a tool that can be embedded into all simulations to explore the perspectives of the patient, family, and/or parent in

each scenario. This would integrate the core concepts of patient- and family-centered care into other scenarios where care team members may have a lack of confidence or awareness of the importance of communication with patients, parents, and families in care, this goal was met, simulations now have two lines in the application to prompt the project manager or anyone asking to use the simulaiton center to ask for volunteer and or patient volunteer participation.

Section VI: Discussion

Summary

This project demonstrates that engaging teams to learn tactics around communication and effective conversations can improve outcomes and benefit patients, families, and the organizational culture. Creating a culture of safety and education about speaking up in relation to concerns leads to improved caregiver confidence and raises awareness and reporting of potential events. By involving patients, parents, and families in communication, and having interactive conversations, not only make the environment a safer place in which to receive care and speak up to express concerns; it also partners with the care team to achieve a common goal. Being susceptible to change and willing to face issues is a must in the health care industry. Ensuring open communication, easing fears, and establishing trust in the care team, creates a culture in which staff feel confident in asking questions and are thankful of patients for sharing their perceptions around care. The project helped to develop insights and gain feedback through an error reporting system about concerns and near misses, thus helping to prevent harm and errors. This project was also an initial step in sharing with staff the importance of involving patients and family members when simulating scenarios to train our care team. Lastly, the project created a safe environment where the organizational leadership encouraged reporting and sharing concerns, and taught nurses to share this message with families, creating transparency, confidence, and trust in the care team.

Lessoons Learned

Simulaiton training is a valuable option for more than basic life support training. Communnicaiton training is an innovative way to utilize simulation and to have open discussions to increase nurses confidence in communicaiton, regarfless of the topic. Nurses feel supported

and that they are given additional knowedge and training by their leadership team when they are invested in. Family council members feel important and that things improtant to them are also top priority for the nurses and care team when their opinions about communication are asked and they are involved in nurse training. Nurses report various levels of comfort in technical and clinical skills, however they had a difficult time rating their ability to have effective clear, transparent conversations. Nurses felt engaged and that their knowledge base was increased by having the opportunity to simulate and debreif about conversations with patients and families around safety. An unexpected finding was that many acronyms and medical terms are severley misunderstood and create fear in parents. One example was during the simulation, one parent was in a role of a homeless father and the nurse let him know she would contact social services to assist with his and his child's situation. At this point, father immediatley stopped communicating. Later at the debreifing, the father reported that when the nurse said social work, all I understood was that my child was going to be taken away and I was going to be punished for a mistake caring for the child. the nurses stated that they had no idea that the parent would think that and stated they will ensure thatt they explain in detail and do not assume patients and parent know what they were thinking. Lessons like this and candid feedbak was invaluable and established a true need for patient and family centered care council input.

Interpretations

This project was the first phase in a much larger project aimed at involving families and patients in the development of a new workplace culture. Central to this culture is the idea: “We have things to work on and we need to practice being safe and speaking up when we are worried.” This project was not about “airing our dirty laundry.” Nonetheless, patients and families were surprised and proud that we took safety so seriously, and that we wanted to talk

through these issues and for them to be a part of the solution. Feedback received from a parent council participant included:

> "I am so glad you asked me my opinion, I didn't want to scare my daughter while we were in the hospital, but we were afraid and afraid to be dismissed if we asked silly questions, now I know you want us to share those questions with you and it is as important to you as it is to us. Thank you for letting us participate so you hear our voice and for making this a priority".

Limitations

Some limitations to the study included staff buy-in to the simulation process and fear of being recorded for debriefing. Staff participation and completion of pre- and post-surveys were also an issue. Recruiting consistent standardized actors from the PFCC council, the availability of nurses to be removed from the clinical areas for training, and the incorporation of random parent feedback into the learning were other limitations.

Other unanticipated limitations were the continued support of leadership when a change was made in the survey process mid-year and the project manager assumed assitional responsabilities. Other limitations are around the spread of the information, and the process. Multiple teams have stated that they would like to recreate the simulation training and do not have family councils or patient feedback forums to utilize families for feedback. The project manager has begun to assist other management teams and staff in these areas to create simulation, starting with a general template, thus helping to create scenarios appropriate for those clinical areas and to form family councils. The last limitation concerned long-term data collection and comparison units. Data continues to be collected in relation to event and near miss reporting. This is a time consuming and labor-intensive process. A comparison unit that did not

participate in the project was used to compare data as a control unit (Appendix W). This must be extracted manually and continues to be assessed on a quarterly basis. The data analysis of variables in simulation (Appendix X) was evaluated for variation in the project and variables observed.

Conclusions

In health care today, innovation drives positive change, and looking to our patients as customers to share with us how to improve communication and confidence is often overlooked as a source of truth. The tools used here can be created using studies with similar goals. This project has created a foundation for others to use and to customize for their individual need. Caregivers felt more confident after participating in this project. The Institute for healthcare improvement (IHI) model was a framework that aligned the goals of the project with the areas of opportunity. In addition, the continuous quality model (Appendix ZZ) was used to evaluate what the relationship the intervention had to the output before and after the simulation.

Implications for practice

After the project, both the pediatric nurses and the PFCC parents felt valued and open to sharing what the care team can do better to allow them the freedom to report mistakes and speak up about their concerns for their family member. Staff have reported a better understanding of what they should be reporting and why. The culture of safety in the pediatric unit where this project was conducted was higher than ever before, with staff reported saying: “I am glad a just culture and safety are so important to our organization and to our unit.” Another statement from a nurse included: “I don’t feel like I am being disciplined when I report an error. It is a learning opportunity for us all. I feel safe working here.”

Staff self-reported that the results of their participation increased their knowledge and ability to have difficult conversations, improved understanding and awareness of the importance of partnerships with parents and patients and changed their practice to encourage meaningful conversations with all patients to ensure they know their role and are actively participating in the communication of mistakes. A patient-led rapid response plan was initiated in the unit based on the results of the survey. Notwithstanding, this process led to the identification of two close catches over the last 6 months by parents who felt comfortable about speaking up and who had been empowered with the tools needed to report mistakes or concern. This model is subsequently being evaluated throughout the organization and will hopefully be implemented soon.

In addition, the positive reinforcement from parents and patients has led to an increase in reported near misses and other possible adverse events in the unit being caught early; thus, preventing adverse outcomes. These early catches are regularly reviewed with the staff and are escalated throughout the organization to share the positive results of this change in workplace culture. Through this simulation, the project manager and the Clinical Nurse Specialist who assisted in the simulation grew to love simulation training and have utilized similar scenarios for other groups. Additionally, we are developing more scenarios with a physician champion for additional interprofessional learning and family involvement.

The recruitment of parents and family members had shown to be beneficial. Parent council members have now participated in additional simulation activities, such as two Ebola/Special pathogen team simulation scenarios, assisted in changing practices regarding how teams communicate with families when a patient is in a critical isolation. The topic was submitted and chosen to be represented at the 2018, 10th International Patient- and Family-Centered Care Conference in Baltimore, about partnering with parents and patients for safety.

The work was also submitted and chosen as a rapid-fire session at the 2018, 8th International IMSH Simulation Conference in Los Angeles, California. During the 5th Magnet designation survey, a pediatric parent participant in this DNP project represented the community, sharing why she participated in the patient- and family-centered care council, and how she felt being asked to participate in the simulations to share how care team members can improve communication and empower parents to speak up and report concerns. This was called out as an exemplar during recent regulatory surveys. The impact of our partnership with patients and families has been exemplified and will continue to support the culture of safety throughout the health care system.

Section VII: Other

Funding

There was no additional funding for this project outside of the current resources and project manager responsability. The employee positions and expectations were part of the project.

VIII. References

AHRQ (2017). Healthcare toolbox, healthcare cost and utilization guide; *Agency for Healthcare Research and Quality*, Rockville, MD. Retrieved June 4, 2017 from: https://www.hcup-us.ahrq.gov

Andel, C., Davidow, S.L., Hollander, M., & Moreno, D.A., (2012) The economics of health care quality and medical errors. *Journal of Health Care Finance*; Fall;39(1):39-50. Retrieved November 2, 2018 from: https://www.ncbi.nlm.nih.gov/pubmed/23155743

Brown, D.S. & Wolosin, R. (2013). Safety culture relationships with hospital nurse sensitive metrics. *Journal of Healthcare Quality* 35(4):61-74 Retreived October, 2018 from: https://www.ncbi.nlm.nih.gov/pubmed/23777363

California Simulation Alliance (2016). California Simulation Alliance. Retrieved October 31, 2018; from https://www.californiasimulationalliance.org/Default.aspx

Chung, P. & Schuster, M. (2004). Access and quality in child health services: Voltage drops. *Health Affairs*; 23:77–87.

Crickmore, K.D. (2010). The relationship between patient satisfaction and patient- and family-centered care. *Relationship Between Patient Satisfaction & Patient-and Family-centered Care* 92 p.3-92, (Doctoral Dissertation, East Carolina University) Retrieved from the Scholarship. (http://hdl.handle.net/10342/2701.)

Drack, M. & Pouvreau, D. (2015). On the history of Ludwig von Bertalanffy's "General Systemology", and on its relationship to cybernetics - part III: convergences and divergences. *International Journal of General Systems*. 2015 Jul 4;44(5):523-571. Epub 2015 Feb 23. PubMed PMID: 26612966; PubMed Central PMCID: PMC4610108.

Duffy, F.D., Gordon, G.H., Whelan, G., Cole-Kelly, K., Frankel, R., ...Langdon, L. (2004); Assessing competence in communication and interpersonal skills: the Kalamazoo II report. *Academic Medicine.* 2004 Jun;79(6):495-507. Review. PubMed PMID: 15165967.PubMed. Retrieved: April 3, 2017: https://www.ncbi.nlm.nih.gov/pubmed/15165967?report

HCAHPS Online (2018) *Centers for Medicare & Medicaid Services*, Baltimore, MD. Retrieved: October 29, 2018 from: http://www.hcahpsonline.org

HR Quality Indicators™ (2014). *Agency for Healthcare Research and Quality*, Rockville, MD. Retrieved June 11, 2017 from: http://www.ahrq.gov/cpi/about/otherwebsites/qualityindicators.ahrq.gov/qualityindicators.html

Greiner, A.C., Knebel, E. (2003). Institute of Medicine Committee on the Health Professions Education Summit; *National Academies Press* (US); Retrieved: May 35, 2017 from: https://www.ncbi.nlm.nih.gov/books/NBK221528/ doi: 10.17226/10681

Institute of Medicine (IOM) (2000). To Err Is Human: Building a Safer Health System. Washington, DC: *The National Academies Press*. doi: https://doi.org/10.17226/9728

Johnson, B.H. & Abraham, M.R. (2012). Partnering with patients, residents, and families: A resource for leaders of hospitals, ambulatory care settings, and long-term care communities. Bethesda, MD: *Institute for Patient- and Family-Centered Care*

Maguire, P., & Pitceathly, C. (2002). Key communication skills and how to acquire them. BMJ (Clinical research ed.), 325(7366), 697-700.

Moody, R.F., Pesut, D.J. & Harrington, C.F. (2006). Creating safety culture on nursing units: human performance and organizational system factors that make a difference. *Journal of Nursing Care Quality.2:198-206*

NRC Health Picker Catalyst Web page (2017). Retrieved November 1, 2017, from: https://catalyst.nrcpicker.com/CatalystHome/SitePages/white-papers.aspx

OSHA: Better Safety Conversations (n.d) *Safe and Sound Safety Conversations*. Retrieved October 28, 2018: https://www.osha.gov/safeandsound/docs/SHP_Better-Safety-Conversations.pdf

Palokas, J.M., Northington, L., Wilkerson, R.R., & Boss, B.J., (2015). An interactive evaluation of patient/family centered rounds on pediatric inpatient units. *Journal of Pediatric Nursing: Nursing Care of Children and Families.* 30(4): e9 – e15.

Ponte, P., Connor, M., DeMarco, R., and Price, J. (2004). Linking patient- and family-centered care and patient safety: the next leap. *Nursing economics*. July-August;22(4):211-3, 215. PubMed PMID: 15382399.

Rosen, P., Stenger, E., Bochkoris, M., Kwoh, C.K., (2009). Family-centered multidisciplinary rounds enhance the team approach in pediatrics. *Pediatrics*. Apr;123(4): e603-8. doi: 10.1542/peds.2008-2238

Society for Simulation in Healthcare (2016). Retrieved October 31, 2018 from http://www.ssih.org/

Szekendi, M.K., Barnard, C., Creamer, J., (2010). Using patient safety morbidity and mortality conferences to promote transparency and a culture of safety. *The Joint Commission Journal on Quality and Patient Safety.* 2010;36(1):3-9.

Thomas, L. & Galla, C. (2003). Building a culture of safety through team training and engagement. *BMJ Quality & Safety;* 22:425-434. doi:10.1136/bmjqs-2012-001011.

USF Mission and Vision statement. Home/Who we are: Jesuit Catholic. November 2017. https://www.usfca.edu/about-usf/who-we-are/vision-mission

Vogelsmeier, A., Scott-Cawiezell, J., Miller, B., & Griffith, S., (2010). Influencing leadership perceptions of patient safety through just culture training. *Journal of Nursing Care Quality*; 25(4):288-94.

Section VI: Appendices

Appendix A: Critical Appraisal Tool: Evaluation Table

Citation	Conceptual Framework	Design/Method	Sample/Setting	Major Variables Studied and their Definition	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice/Level Quality
Palokas, Northington & Wilkerson, (2015).	None	Quality improvement project.	Families and patients in the acute care setting.	Communicating about his or her own or their child's care and plan.	Conversational survey	Quality metrics and measures discussed.	Increase in staff satisfaction, family & patient participation, increase family satisfaction. Conclusions: Family participation in multidisciplinary rounds were seen as a benefit.	JHNEBP Non-Research tool: V, B Strengths: Quality topic and quality measures Weaknesses: Evaluation and conclusions. Ability to replicate.

Citation	Conceptual Framework	Design/Method	Sample/Setting	Major Variables Studied and their Definition	Measurement	Data Analysis	Findings	Appraisal: Worth to Practice/Level Quality
Duffy et. al, (2004).	Systems Therapy	QI Quality Improvement Project	Assessing competence in communication and interpersonal skills:	Adult based, did not encompass pediatrics dynamics.	The Kalamazoo II report.	Surveys	Care teams do not understand the impact of decision-making without families	JHNEBP: II, B Strengths: Quality thought to the questions of caregivers. Many examples. Weaknesses Needs further investigation and repeat.
Rosen, Stenger, Bochkoris, Hannon, &	None	QI Quality Improvement Project	Paper survey Forms. 53 surveys were collected over 2 weeks.	Pediatric Department, families	Survey data to determine the impact as compared to	Surveys	Caregivers reported better understanding of medical	JHNEBP: II, A Strengths:

Kwoh, (2009).				various ages of patients.	perceptions in multidisciplinary rounds.		plans, teamwork. Family involvement in medical decision-making 90% of the cases.	Quality questions, and results from various people. Weaknesses Limited time and minimal results
Citation	**Conceptual Framework**	**Design/Method**	**Sample/Setting**	**Major Variables Studied and their Definition**	**Measurement**	**Data Analysis**	**Findings**	**Appraisal: Worth to Practice/Level Quality**
Ponte, P., Connor, M., DeMarco, R., and Price, J. (2004)	None	Non-experimental qualitative study and subjective results.	Staff reports in the acute care inpatient setting	Error reporting tool and system.	Review of increase in reported events and establishment of committee purpose.	Report of survey response data using bivariate and regression analysis.	There was a 15-fold increase in the number of Safety reports generated (n=184) in the incident reporting system (n=12).	JHNEBP: V, C Strengths: Established safety rounds and criteria.
Citation	**Conceptual Framework**	**Design/Method**	**Sample/Setting**	**Major Variables Studied and their Definition**	**Measurement**	**Data Analysis**	**Findings**	**Appraisal: Worth to Practice/Level Quality**
Maguire, Pitceathly (2002)	None	Quality Study	Discussion on communication skills tactics	Providers including clinical staff physicians and nurses	Discussion around communication tactics and skills learned vs. innate.	Conversational survey	Communication increases with providers-doctors after learning how to acquire skills	JHNEBP: III, D Strengths: Conversational study and theory rather than actual data. Weaknesses: One setting and generalized results.

	A	B	C	D	E
Studies (Author & Year)	Palokas, Northington & Wilkerson, (2015).	Crickmore, K. D. (2010).	Ponte, Connor, DeMarco, & Price, (2004).	Rosen, Stenger, Bochkoris, Hannon & Kwoh (2009).	Maguire & Pitceathly (2002).
Modifiable Workplace Characteristic					
Development of alternative methods of Communication	x		x	x	x
Perception changes in impact of family input		x	x	x	x
Perception of Safety increase after initiative	x		x	x	
Outcome					
Simulation scenarios		x	x		
Communication changes and inclusion of family/ patient/ parent input	x	x	x	x	x

Appendix B: Data Collection Survey

QUALTRICS SURVEY Pre-Simulation and Post-Simulation Survey

Pediatric Nurse Evaluation of Communication and Partnership with Parents for Safety

---

Start of Block: Default Question Block

Q1 I understand that I am part of a DNP Study and I agree to participate, and I understand that my participation in this survey is confidential and optional.

- ○ yes (1)
- ○ No (2)

Q20 *"This project was undertaken as an Evidence-based change of practice project at Cedars-Sinai Medical Center and as such was not formally supervised by the Institutional Review Board."*

---

2 How many years have you been a Nurse

- 0-2 (1)
- 2-5 (2)
- 5-10 (3)
- 10-20 (4)
- 20+ (5)

Q3 Do you have personal experience as a patient (or family member of a patient) where you felt that the care team lacked skills in communication?

- Definitely yes (1)
- Probably yes (2)
- Might or might not (3)
- Probably not (4)
- Definitely not (5)

Q4 This section will ask about YOUR comfort around conversations about communication.

Q5 How comfortable are you with involving patients (When age appropriate) in care planning and conversations around your role and their role in their care. (PRE-SIMULATION)

- ○ Extremely comfortable (1)
- ○ Somewhat comfortable (2)
- ○ Neither comfortable nor uncomfortable (3)
- ○ Somewhat uncomfortable (4)
- ○ Extremely uncomfortable (5)

Q22 How comfortable are you with involving patients (When age appropriate) in care planning and conversations around your role and their role in their care. (POST SIMULATION)

- ○ Extremely comfortable (1)
- ○ Somewhat comfortable (2)
- ○ Neither comfortable nor uncomfortable (3)
- ○ Somewhat uncomfortable (4)
- ○ Extremely uncomfortable (5)

Q6 How comfortable are you with involving Families and Parents in care planning and conversations around your role and their role in their child's care? (PRE-SIMULAITON)

- ○ Extremely comfortable (1)
- ○ Somewhat comfortable (2)
- ○ Neither comfortable nor uncomfortable (3)
- ○ Somewhat uncomfortable (4)
- ○ Extremely uncomfortable (5)

Q23 How comfortable are you with involving Families and Parents in care planning and conversations around your role and their role in their child's care? (POST-SIMULAITON)

- ○ Extremely comfortable (1)
- ○ Somewhat comfortable (2)
- ○ Neither comfortable nor uncomfortable (3)
- ○ Somewhat uncomfortable (4)
- ○ Extremely uncomfortable (5)

Q7 How do you feel about practicing communication skills with families and parents present during simulation. (PRE-SIMULATION)

- ○ Extremely comfortable (23)
- ○ Somewhat comfortable (24)
- ○ Neither comfortable nor uncomfortable (25)
- ○ Somewhat uncomfortable (26)
- ○ Extremely uncomfortable (27)

Q25 How do you feel about practicing communication skills with families and parents present during simulation. (POST-SIMULAITON)

- ○ Extremely comfortable (23)
- ○ Somewhat comfortable (24)
- ○ Neither comfortable nor uncomfortable (25)
- ○ Somewhat uncomfortable (26)
- ○ Extremely uncomfortable (27)

Q8 How comfortable are you with speaking to patients about a reporting mistake and or concern? (PRE-SIMULAITON)

- ○ Extremely comfortable (1)
- ○ Somewhat comfortable (2)
- ○ Neither comfortable nor uncomfortable (3)
- ○ Somewhat uncomfortable (4)
- ○ Extremely uncomfortable (5)

Q24 How comfortable are you with speaking to patients about a reporting mistake and or concern? (POST-SIMULAITON)

- ○ Extremely comfortable (1)
- ○ Somewhat comfortable (2)
- ○ Neither comfortable nor uncomfortable (3)
- ○ Somewhat uncomfortable (4)
- ○ Extremely uncomfortable (5)

Q9 How comfortable are you with speaking to Parents or Family members about a reporting mistake and or concern? (PRE-SIMULATION)

- ○ Extremely comfortable (1)
- ○ Somewhat comfortable (2)
- ○ Neither comfortable nor uncomfortable (3)
- ○ Somewhat uncomfortable (4)
- ○ Extremely uncomfortable (5)

Q26 How comfortable are you with speaking to Parents or Family members about a reporting mistake and or concern? (POST-SIMULATION)

- ○ Extremely comfortable (1)
- ○ Somewhat comfortable (2)
- ○ Neither comfortable nor uncomfortable (3)
- ○ Somewhat uncomfortable (4)
- ○ Extremely uncomfortable (5)

Q10 How do you feel about practicing Reporting a mistake to a family or encouraging them to report mistakes with PFCCC parents and families present in simulation? (PRE_SIMULAITON)

- ○ Extremely comfortable (18)
- ○ Somewhat comfortable (19)
- ○ Neither comfortable nor uncomfortable (20)
- ○ Somewhat uncomfortable (21)
- ○ Extremely uncomfortable (22)

Q27 How do you feel about practicing Reporting a mistake to a family or encouraging them to report mistakes with parents and families present in simulation? (POST-SIMULAITON)

- ○ Extremely comfortable (18)
- ○ Somewhat comfortable (19)
- ○ Neither comfortable nor uncomfortable (20)
- ○ Somewhat uncomfortable (21)
- ○ Extremely uncomfortable (22)

Q19 How comfortable do you feel having a parent or family member present while placing an IV? (PRE-SIMULATION)

- ○ Extremely comfortable (18)
- ○ Somewhat comfortable (19)
- ○ Neither comfortable nor uncomfortable (20)
- ○ Somewhat uncomfortable (21)
- ○ Extremely uncomfortable (22)

Q34 How comfortable do you feel having a parent or family member present while placing an IV? (POST-SIMULAITON)

- ○ Extremely comfortable (18)
- ○ Somewhat comfortable (19)
- ○ Neither comfortable nor uncomfortable (20)
- ○ Somewhat uncomfortable (21)
- ○ Extremely uncomfortable (22)

Q11 the following questions will ask you to rate your Skill or Competency in communication.

Q12 How do you rate your ability to clearly communicate with families, patients, and Parents about procedures, tests or the plan for the shift together? (PRE-SIMULATION)

- ○ Extremely competent (1)
- ○ Somewhat competent (2)
- ○ Neither competent nor incompetent (3)
- ○ Somewhat incompetent (4)
- ○ Extremely incompetent (5)

Q28 How do you rate your ability to clearly communicate with families, patients, and Parents about procedures, tests or the plan for the shift together? (POST-SIMULAITON)

- ○ Extremely competent (1)
- ○ Somewhat competent (2)
- ○ Neither competent nor incompetent (3)
- ○ Somewhat incompetent (4)
- ○ Extremely incompetent (5)

Q13 How confident do you feel in narrating your care with the family member or patient at the bedside as you chart? (PRE-SIMULATION)

- ○ Extremely competent (1)
- ○ Moderately competent (2)
- ○ Slightly competent (3)
- ○ Neither competent nor incompetent (4)
- ○ Slightly incompetent (5)
- ○ Moderately incompetent (6)
- ○ Extremely incompetent (7)

Q29 How confident do you feel in narrating your care with the family member or patient at the bedside as you chart? (POST-SIMULATION)

- ○ Extremely competent (1)
- ○ Moderately competent (2)
- ○ Slightly competent (3)
- ○ Neither competent nor incompetent (4)
- ○ Slightly incompetent (5)
- ○ Moderately incompetent (6)
- ○ Extremely incompetent (7)

Q14 the last two questions will ask about your perceptions.

Q15 How important do you feel it is to partner with patients, parents, and families? (PRE-SIMULAITON)

- ○ Extremely important (1)
- ○ Very important (2)
- ○ Moderately important (3)
- ○ Slightly important (4)
- ○ Not at all important (5)

Q30 How important do you feel it is to partner with patients, parents, and families? (POST-SIMULATION)

- ○ Extremely important (1)
- ○ Very important (2)
- ○ Moderately important (3)
- ○ Slightly important (4)
- ○ Not at all important (5)

Q16 Rank the most important reasons to communicate
_____ Test Results (1)

_____ Plan for the day (2)

_____ Goals for discharge (3)

_____ How to call for help (4)

_____ When a medication is due (5)

Q17 What other skills do feel you would like to continue to develop in order to communicate more effectively? _____

Q32 What is something that you learned, or gained knowledge in that would you add to EVERY Simulation for future
participants? _____

Q31 Do you feel that future Simulation can benefit from having Patients, Families and or Parents participate in Simulation?

- YES (1)
- No (2)
-

Q35 Do you feel that this training will improve your communication and or clinical practice? _____

Q36 Any Other Feedback?

_____

Q18 Thank you for participating in the pre-simulation survey. It is appreciated!

End of Block: Default Question Block

Appendix C. ***Script andsSimulation scenario***

*****FOR INSTRUCTORS & SIM OPERATORS ONLY**
10 Minute Scenario Child Simulator used***

Scenario Synopsis

Title: Pediatric IV Skills Training, Partnering with families, parents and patients for safety; Reporting mistakes
Diagnosis:
Target Audience: Pediatric Nurses
Prerequisite knowledge and skills: Pediatric Nursing, Family centered Care, IV skills

Background Information for Learner

This is a three-year-old male child who was admitted to the ED at 4:30 AM this morning by night shift and you just came on to day shift. The mother brought him in because of "poor feeding, weakness fussiness and just not acting right".
You are the primary RN; your charge nurse welcomed the patient into the room and you just completed bedside handoff. You introduced yourself and are reviewing your pending orders.
New orders: STAT IV Fluid Bolus with D5LR with one 300 MLs over 2 hours, Lab Test with IV start: CBC, CMP, Temperature monitoring q shift and prn, Diet as tolerated.
You notice the child is cool and sluggish.
Parent seems upset/ distraught
Medications: None at this time.

Patient Demographics

Name: Steven LaMar **MRN:** 12345 **Gender: Male**
Age: 5 years old **DOB: 10.31.2011** **Race: Caucasian**
Height: 3' 0" **Weight:** 25 kg **Religion:** Unknown
Chief complaint: "Fussy, tired, weak, cold"

Scenario Events Summary

Sequence of events:

1. RN to review new orders
2. RN to review plan of care
3. RN to start IV
4. RN to Start 2nd IV (Will Infiltrate)
5. Parent to express concerns, feeling uneasy.
6. Parent to report she is worried about intake of fluids of child (will not offer up the info) and they both have not eaten since yesterday.
7. Will not ask for help, but mother to insist on "something is wrong" RN will need to see that there is an issue.

Educational Objectives

Skills:

Start IV, 1st attempt is unsuccessful, 2nd attempt is in. Parent will think it is swelling. Will need to be removed.
Should use Poke plan and comfort plan with parent.
Communicate with is happening first with family.

Observable Actions Checklist

Welcome mother and patient, active listener, active communication around plan and mistake will be missing the IV multiple times.

Debriefing Questions

1. How did you feel? To obtain general feeling/experience of students…
2. How did we communicate with the family that included open ended questions and prompts to ensure the family understood the plan of care?
3. Did you feel on the spot with the parent watching and questioning your IV skills? When you lost the IV did you feel guilty?
4. When you lost the IV did you feel like you spoke to the mother in a way that she understood?
5. How was the interaction or communication with the child?
6. What kind of perception or feeling did you receive from the mother? Do you think you instilled confidence in the family? Do you feel like the mother was a partner and would bring any concerns to you without hesitation?
7. Do you feel like you could have changed your tactics in any way to listen carefully or explain things in greater detail?
8. What would you have said to assist you to have a team mate in the parent when starting the IV?
9. What would you do differently next time or what is a take away theme from this simulation experience?

Take Home Points

1. Assure Parents feel as they are listened to and that their child is important.
2. Parents know their children better than we do and need to know we hear them.
3. When a child is sick, often parents feel helpless.
4. Parents often feel like if they report a concern, it will be held against them, afraid to speak up.
5. We need to ensure our families know that we are better together with them.
6. Ensuring that the plan is agreed upon and mutually understood is imperative to success.
7. The caregiver speaking to how to report concerns is important to ensure the parents and the child have a way to express something that isn't right and is thanked for being part of the solution.

Patient Chart Information

Name: Steve LaMar **MRN:** 12345 **Gender: Male**

Chief complaint: Lethargy, not eating, cold

History of Present Illness: This is a three-year-old male child who was admitted to the ED at 4:30 AM this morning by night shift and you just came on to day shift. The mother brought him in because of "poor feeding, weakness fussiness and just not acting right".
Child is cool and sluggish.
Psychosocial: Parent states feeding child inappropriate feed (could be reason for illness), currently homeless, living in car. Will not share info unless prompted. Feeling to blame, the infant has not eaten in many hours. Parent seems upset/ distraught.
Medications: None at this time. Nurse has already completed handoff.

Past Medical History: URI/ UTI in the last 3 months. Vaccinations late

Past Surgical History: Circ, all vaccinations up to date.

Medications: Benadryl 25 mg PO once last night

Allergies: Seasonal, unknown otherwise.

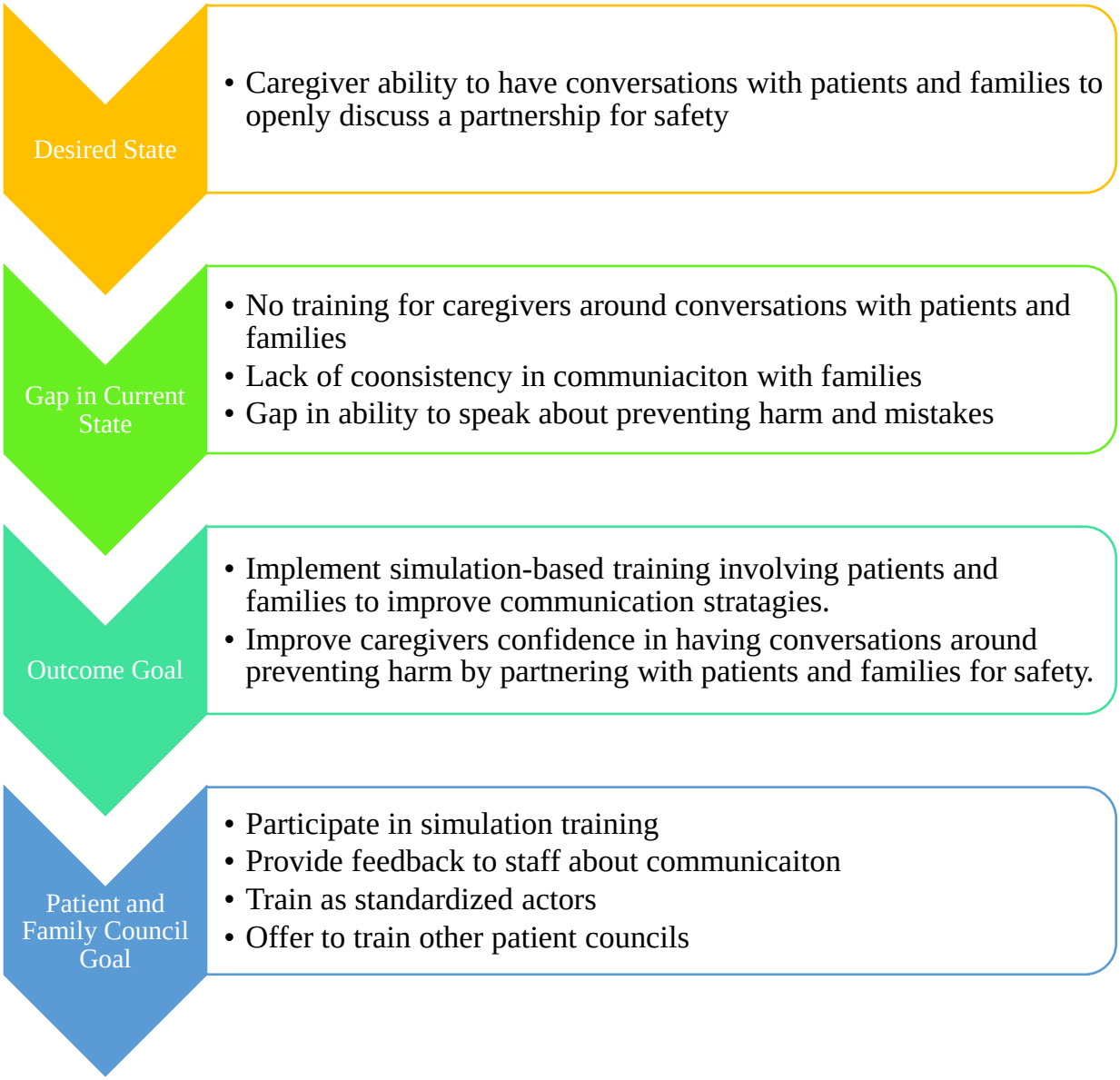
Family/Social History: Father caregiver, recently dislocated, living with family, friends and in vehicle.

Review of Systems: lethargic, slightly hypotensive.

Physical Examination: lethargic, slightly hypotensive.

Scenario Variations
NONE- Standardized
Actor Roles/Scripts
PFCCC (Parent and Family Centered Care Council) Parent Véronique Mastey, Steven Guerrero, Grant Caufield
Props and Setup
Simulator (model, position, appearance): Child young (5 years old) boy naked with light blanket **Monitors and machines: Crib or Bed, Chair** **Clinical supplies: IV Supplies, Monitor, Lights, IV guide, Accuvien, Transilluminator, VR, Buzzy, & EMLA, Wee Light** **Other props: Family belongings** **Room/monitor set up:** basic **What's available if asked:** Water, blankets, labs, poke plan, emla, Buzzy, wee light comfort tools, teddy bear, parent blankets.
Curricular Integration
Poke Plan (Pediatric Pain communication plan), Pain modalities, patient and family centered care, IV Skills, Emla (Topical crem that numbs site) Training, Intraveneous Ultrasound Training.
Evaluation Methods & Tools
Clinician verbal feedback, Clinician Pre-Survey, Clinician Post-Survey
Additional Notes
Parent Council members as part of simulation. DNP Project, quality improvement simulation.
References
Brown D.S., & Wolosin R. Safety culture relationships with hospital nurse sensitive metrics. *J Healthcare Qual* July/Aug 2013;35(4):61-74 Moody RF, Pesut DJ, & Harrington CF. Creating safety culture on nursing units: human performance and organizational system factors that make a difference. *J Patient Saf* 2006; 2:198-206 Szekendi MK, Barnard C, & Creamer J, et al. (2010). Using patient safety morbidity and mortality conferences to promote transparency and a culture of safety. *Jt Comm J Qual Patient Saf* 2010;36(1):3-9. Thomas L, Galla C. Building a culture of safety through team training and engagement. *BMJ Qual Saf* 2013; 22:425-434. doi:10.1136/bmjqs-2012-001011. Vogelsmeier A, Scott-Cawiezell J, Miller B, et al. Influencing leadership perceptions of patient safety through just culture training. *J Nurs Care Qual* 2010;25(4):288-94.

Appendix D: Gap analysis



Appendix E: SWOT Analysis

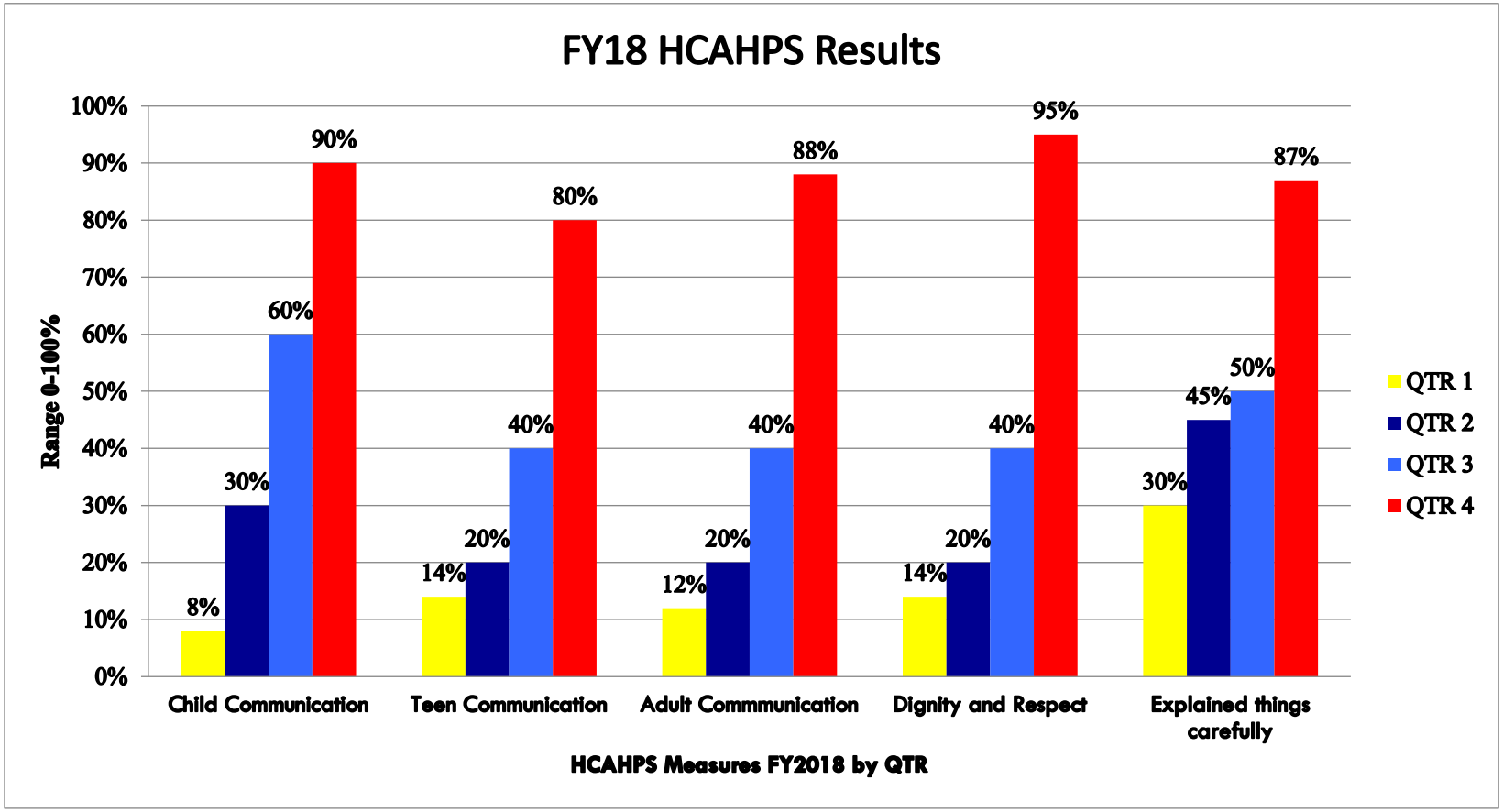
	Have	Need
Internal Origin	• **Strengths** • Training approved and part of normal leadership duties. • Volunteer parent participants willing to participate. • Improving HCACPS will benefit current position. • Staff engagement around quality and safety is high. • World Class Simulation Center is available • Population of nurses willing to participate is high.	• **Weaknesses** • Simulation time takes funding to send nurses • Training must be tied in to other education staff • Leadership time commitment is large • Leadership trained in simulation is lacking. • Need to obtain same amount of responses from repeat surveys • HCACPS results have low number of respondents • MIDAS Reports are difficult to track if attributed to another department
External Origin	• **Opportunities** • Evidence demonstrated the impact of family participation if willing to partner • Patient and family participation in all Simulation will assist caregivers to change perceptions.	• **Threats** • simulation requires completion scheduled program. • Nurse ability to communicate varies. • Training costs money • Competing priorities

	• Staff experience with communication may vary and improve from simulation training. • Opportunity to integrate this training into all simulation. • Opportunity to add purpose to new hire orientation, • Opportunity to impact QSEN competencies for family centered care. • Opportunity to impact family centers care framework • Opportunity to create a parent actor/ standardized actor group at organization. • CSA resource	• HCACPS results have low Number of respondents internally • MIDAS Entries difficult to track if attributed to another department • Patient and family participation in all simulation will need to be unbiased. • Difficulty obtaining data from another department/need assistance of an analyst

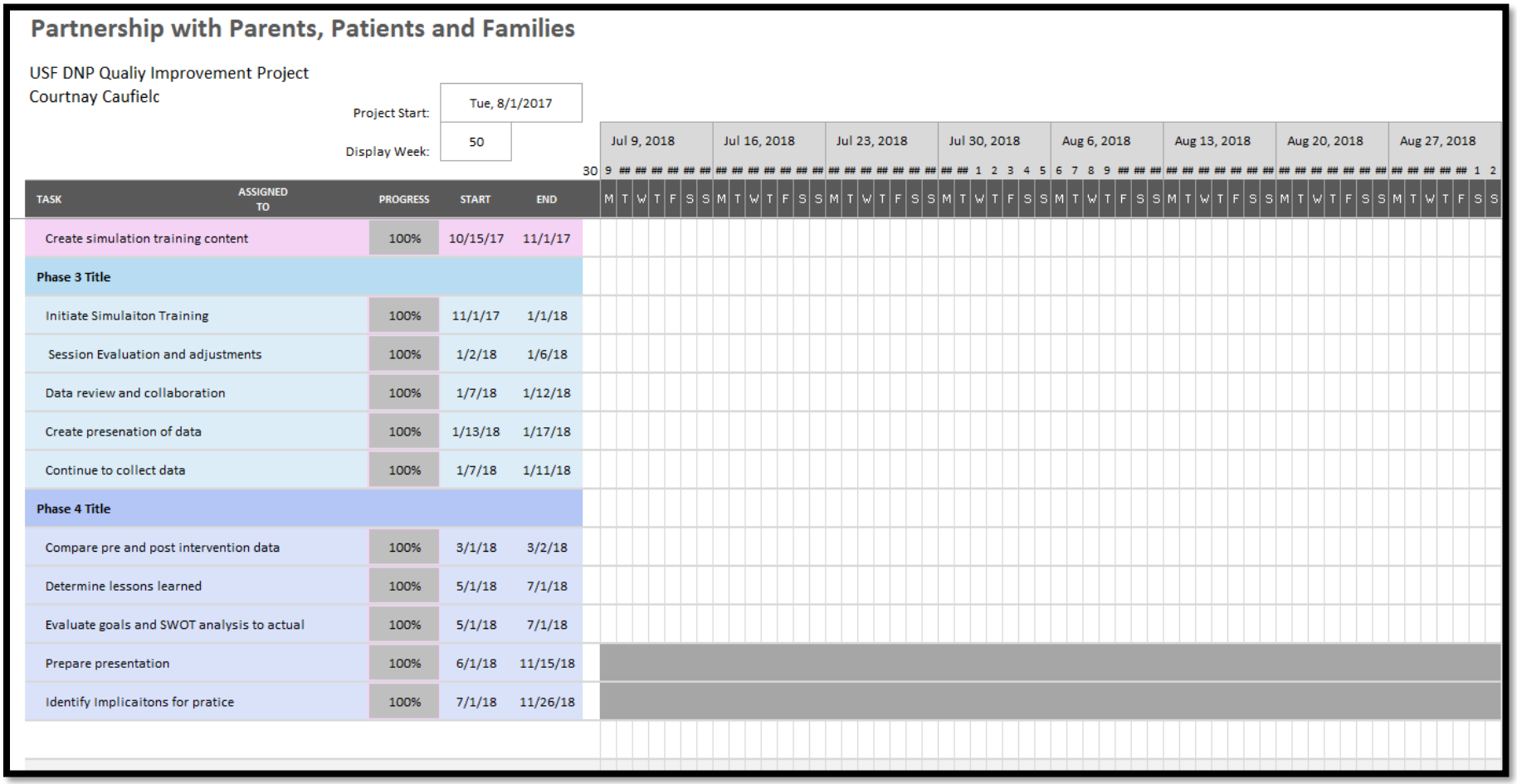
Appendix F: Data summary HCAHPS *Trending FY18 (Quarters 1, 2, 3 & 4)*

Quarters 1 and 2 are Pre-Simulation Fiscal Year 2018, July 2017- December 2017

Quarter 3 (January- March 2018) during simulation training, Quarter 4 (April 2018-June 2018) Post Simulation Training.



Appendix G: Gantt chart



Partnership with Parents, Patients and Families

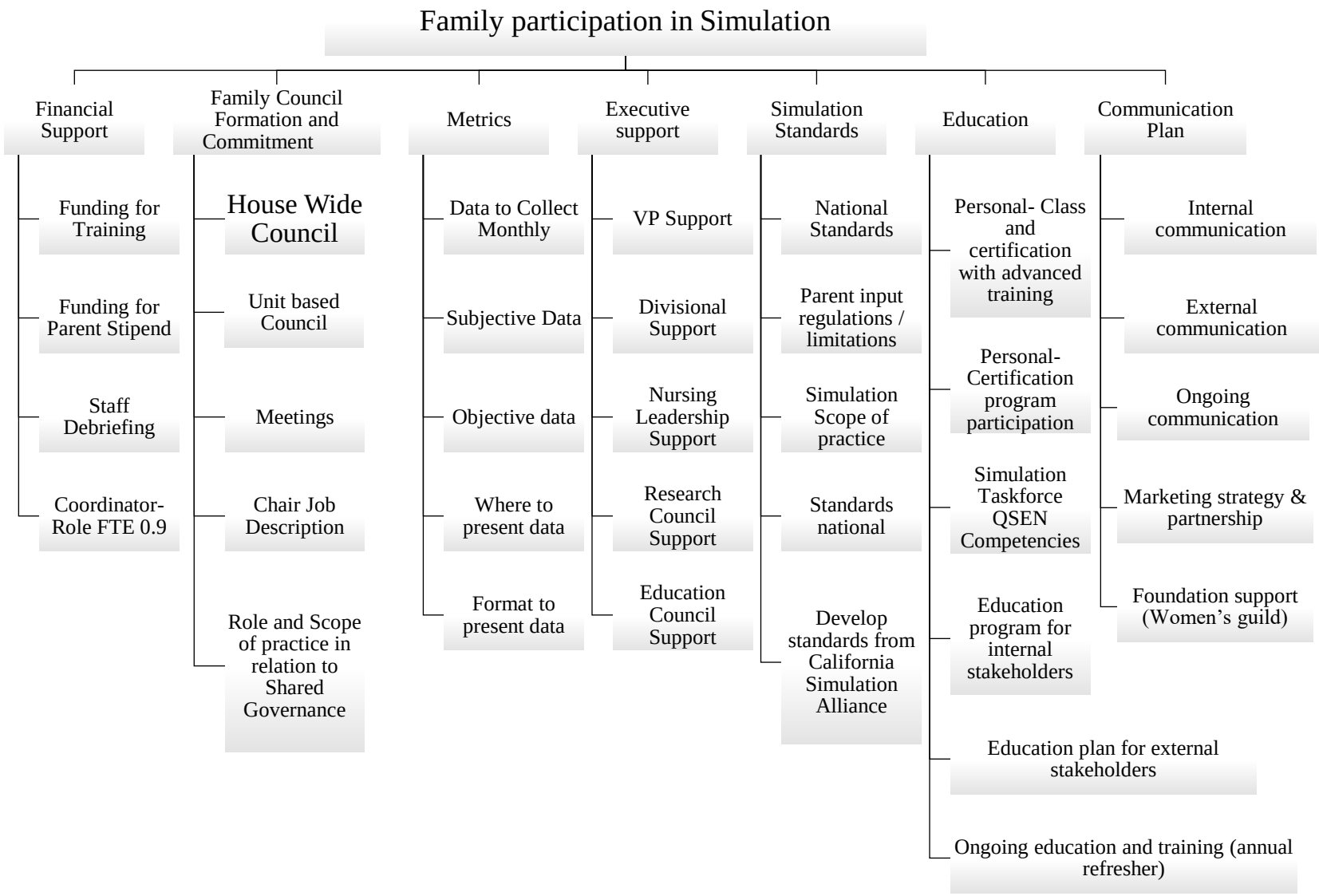
USF DNP Qualiy Improvement Project
Courtnay Caufielc

Project Start: Tue, 8/1/2017
Display Week: 50

TASK	ASSIGNED TO	PROGRESS	START	END
Create simulation training content		100%	10/15/17	11/1/17
Phase 3 Title				
Initiate Simulaiton Training		100%	11/1/17	1/1/18
Session Evaluation and adjustments		100%	1/2/18	1/6/18
Data review and collaboration		100%	1/7/18	1/12/18
Create presenation of data		100%	1/13/18	1/17/18
Continue to collect data		100%	1/7/18	1/11/18
Phase 4 Title				
Compare pre and post intervention data		100%	3/1/18	3/2/18
Determine lessons learned		100%	5/1/18	7/1/18
Evaluate goals and SWOT analysis to actual		100%	5/1/18	7/1/18
Prepare presentation		100%	6/1/18	11/15/18
Identify Implicaitons for pratice		100%	7/1/18	11/26/18

Jul 9, 2018 | Jul 16, 2018 | Jul 23, 2018 | Jul 30, 2018 | Aug 6, 2018 | Aug 13, 2018 | Aug 20, 2018 | Aug 27, 2018

Appendix H: Work breakdown structure (WBS)



Appendix I: Responsibility/ communication Matrix

Information	Target Audience	Frequency	Method	Lead
Project development	1. Chair/Advisor (Dr. Brian Budds) 2. USF Committee 3. Cedars-Sinai Simulation Center Faculty 4. USF faculty 5. Cedars-Sinai Pediatric Educator 6. CSMC management/executive leadership 7. Parent Council Members (PFCCC)	Biweekly, and as needed	In person and electronically, via email as needed.	C. Caufield- Project Manager
Project Implementation	1. Chair/Advisor (Dr. Brian Budds) 2. Cedars-Sinai Simulation Center Faculty 3. Project participants (Cedars-Sinai Pediatric Nurses and Cedars-Sinai Parent Council Members). 4. CNS- Pediatrics 5. Executive Director Women's and Childrens 6. CNE Linda Burnes-Bolton	Weekly and as needed	In person and electronically Via email, web ex and text messaging as needed	C. Caufield- Project Manager
Project approval and dissemination	1. Chair/Advisor (Dr. Brian Budds) 2. USF Committee 3. CNE LindaBurnes Bolton 4. Cedars-Sinai Simulation Center Faculty	Weekly and as needed	In person and electronically	C. Caufield- Project Manager

Progress status report	1. Chair/Advisor (Dr. Brian Budds) 2. USF Committee 3. Mary Lynne Knighten, DNP 4. CNE- Linda Burnes-Bolton 5. Exeutive Director of Women and Childrens 6. Cheif patiet safety officer	Monthly and as needed	In person, phone, and electronically. Stoplight reports as requested/ indicated for audience	PC. Caufield- Project Manager
Milestone report	7.Chair Dr Brian Budds	Quarterly	Electronically	Caufield- Project Manager
Negating decisions	8.Chair/Advisor 9.CSA Faculty 10. Comittee- Mary Lynne Knighten DNP	As needed	In person, phone, and electronically	Caufield- Project Manager
Deliverables Adjustments	11. Chair 12. Comittee- Mary Lynne Knighten DNP	As needed	Electronically	Caufield- Project Manager
Change in scope	13. Chair	As needed	Electronically	Caufield- Project Manager
Surveys/ Mentoring/ Consultation	14. Project participants 15. USF Faculty 16. Simulation enter faculty 17. Pediatric Educator- Tessie Guerrero 18. Assistant Nurse managers Maureen Chin and Jennifer Underhill	Monthly and as needed	Electronically, via phone, mail	Caufield- Project Manager
Evaluation	19. Chair		Electronically	Caufield- Project Manager

Appendix J: Project Budget

Appendix J: Project Budget

Participants: 35			
Staff	Budget	Actual	Notes
Project Manager	$3,328.00	$3,328.00	0.2 FTE, 12 months, $80/hr. (Time in Sim- 195 hours total) Time set up or scenario development 20 hours Time debriefing and reviewing results 160 hours Time presenting and sharing data 28 hours Total 403 hours
Simulation Faculty, Pediatric Educator	$500.00	$1,200.00	$50/ hr. x 2 people (10 hours)
Staff Education	$12,250	$9,500	$70/ hr., 5hrs/person x 35 people
Operating Costs	Budget		Notes
Office: Printing	$500.00	$150.00	Scripts, Thank you cards
Simulation Rental Costs	$800.00	$500	8 Sessions $100/Each
Appreciation gifts	$235.00	$300	Starbucks gift cards ($5x35) ($20x3)
Total Expenses	$17,413.00	$14,978.00	
Under Budget	**($2,435.00)**		

Appendix L: Signed statement of non-research determination form and /or IRB approval

Student Name: Courtnay Caufield_____

Title of Project:

Nursing Communication Partnership with Patients, Parents and Families for Safety through Simulation.

Brief Description of Project:

1) This project will focus on improving staff confidence in communication with patients, parents and families through simulation.

2) Improve caregiver reported ability to have purposeful conversations with families to report mistakes and create a culture of safety through simulation training to reduce harm and increase the perception of partnership as reported through HCAHPS scores and caregiver reporting.

A) Aim Statement:

In the agreed upon time as approved by faculty chair, this project will implement and evaluate the effectiveness of simulation center training around communication skills to improve caregiver confidence and ability in effective safety partnership-based communications with patients, parents and families.

B) Description of Intervention:

A convenience sample of pediatric nurses in an acute medical center will be surveyed before and after the simulation training to evaluate their own perceptions in their ability to effectively communicate with families, patients and parents around a safety partnership. Simulation training will be administered in small groups focusing on skills, communication tactics, active listening and family communication. Staff will be able to simulate conversations that are often difficult with parents from the patient and family centered care council in a non-threatening setting. Staff will provide qualitative data on what the impact of the training was and will provide feedback into how they will change their practice. Various tools, input from patients and families and patients and the ability to evaluate the impact through CHILD HCAPHS scores.

C) How will this intervention change practice?

Enhance and develop better communication tools for staff and connection to purpose around communication, how and why it is important and better understand the role of the family/ parent/ patient in the care team.

Improve tools for communication and return demonstrations as well as patient feedback.

D) Outcome measurements:

- Surveys of staff will provide insight into their pre-training perception and post training perception on their communication ability.
- Tool will be developed to include communication conversations in future simulations and patient, parent or family input.
- Patient family council members, teen volunteers and patient advocates will be included in simulation and valued as integral parts of communication training.
- Local and global leadership will understand the importance of family, patient and parent communication and participation around conversations about safety and preventing mistakes.
- HCAHPS Scores in Nurse communicate with patient, adult, child and teen scores will improve over 3 quarters.
- HCAHPS Scores in patient and parent ability to report mistakes or concerns will improve over 3 quarters.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: (http://answers.hhs.gov/ohrp/categories/1569)

X This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

☐ This project involves research with human subjects and must be submitted for IRB approval before project activity can commence. Comments:

EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements:

Project Title: Nursing Communication Partnership with Patients, Parents and Families for Safety through Simulation	**YES**	**NO**
The aim of the project is to improve the process or delivery of care with established/-accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	**Yes**	

The specific aim is to improve performance on a specific service or program and **is a part of usual care**. ALL participants will receive standard of care.	**Yes**	
The project is **NOT** designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does **NOT** follow a protocol that overrides clinical decision-making.	**Yes**	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does **NOT** develop paradigms or untested methods or new untested standards.	**Yes**	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does **NOT** seek to test an intervention that is beyond current science and experience.	**Yes**	
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	**Yes**	
The project has **NO** funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	**Yes**	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., **not** a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	**Yes**	
If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: "*This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board."*	**Yes**	

ANSWER KEY: If the answer to **ALL** these items is yes; the project can be considered an Evidence-based activity that does NOT meet the definition of research. **IRB review is not required. Keep a copy of this checklist in your files.** If the answer to ANY of these questions is **NO**, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

STUDENT NAME (Please print):

Courtnay Caufield _____

Signature of Student: *Courtnay Caufield*_____DATE_____10.12.2017_____

SUPERVISING FACULTY MEMBER (CHAIR) NAME: Brian Budds, JD, MS, RN

Signature of Supervising Faculty Member (Chair):

_____DATE_____

Appendix M: Letter of support from organization

CEDARS-SINAI MEDICAL CENTER@

Linda Burnes Bolton, DrPH, RN, FAAN
Senior Vice President, Nursing and System Chief Nursing Executive
James R. Klinenberg, MD, and Lynn Klinenberg-Linkin Endowed Chair in Nursing

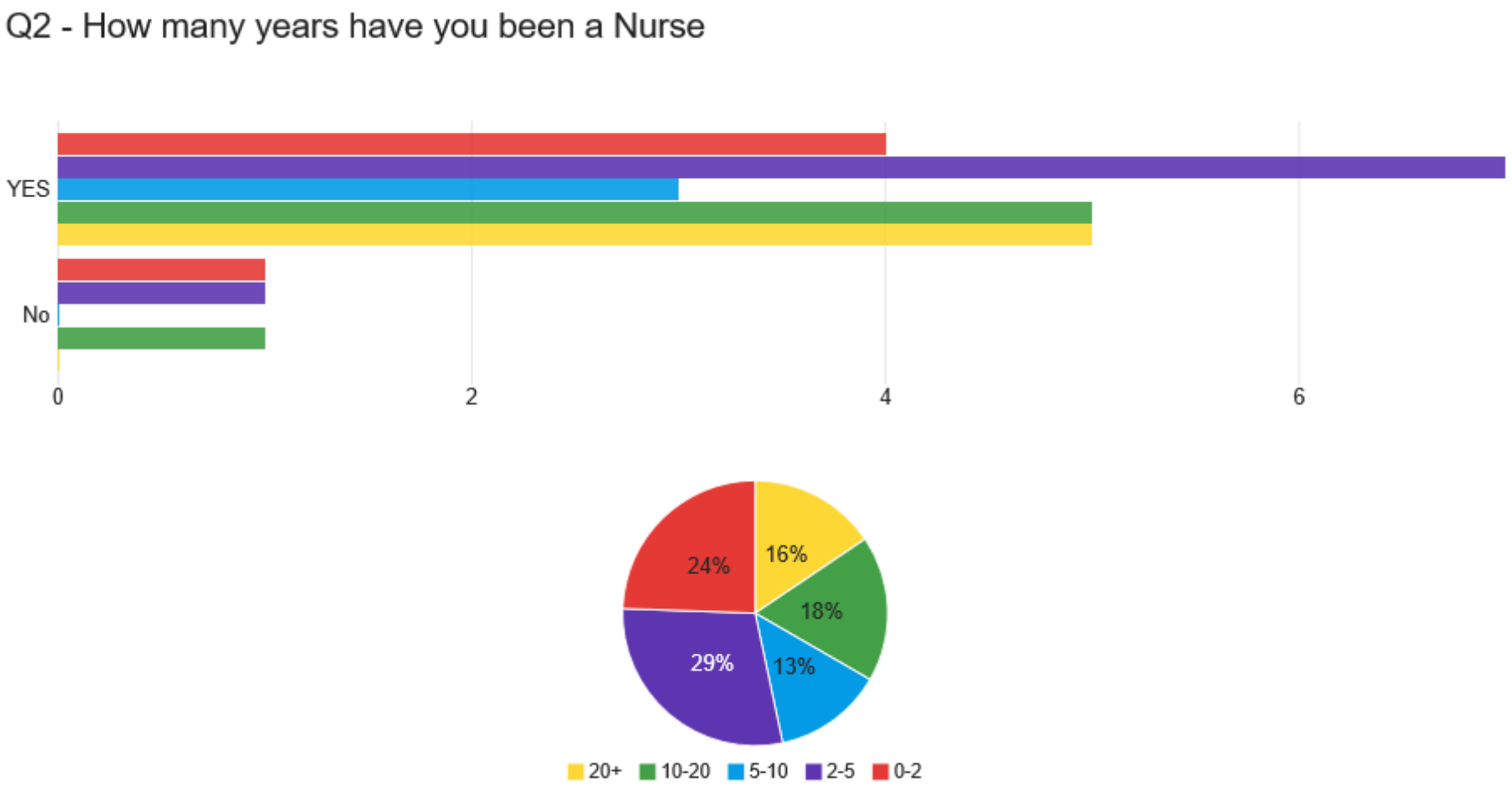
This letter is to acknowledge that Courtnay Caufield, RN is enrolled in the ELDNP Program at the
University of San Francisco and is working on her DNP quality improvement project manuscript. I am aware and approve of her project work at Cedars-Sinai Medical Center and understand that her work will be in alignment and will not be anything outside of her usual work duties.

Thank you

LBB

Linda Burnes Bolton, DrPH, RN, FAAN Senior Vice President, Nursing and System Chief Nursing Executive James R. Klinenberg, MD, and Lynn Klinenberg-Linkin Endowed Chair in Nursing

Appendix N: Nurse background years as a nurse



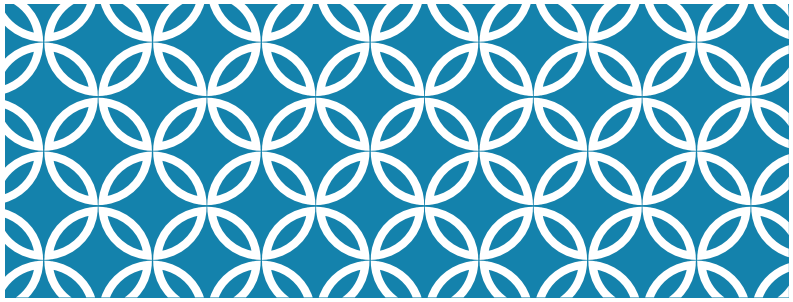
Appendix O. Data Summary: Pre- and post-simulation survey results

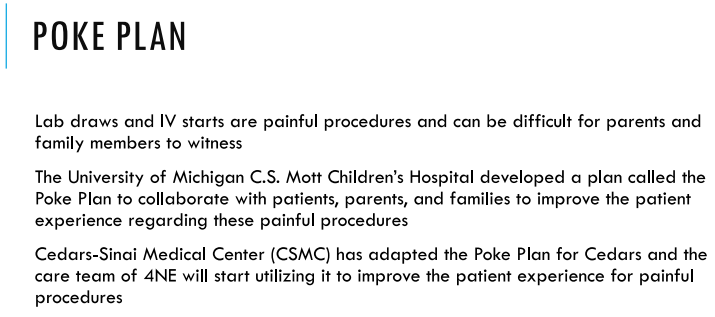
How comfortable are you with speaking to Parents or Family members about a reporting mistake and or concern?

#	Answer	%	Count
PRE SIMULAITON			
1	Extremely comfortable	15.15%	5
2	Somewhat comfortable	57.58%	19
3	Neither comfortable nor uncomfortable	12.12%	4
4	Somewhat uncomfortable	12.12%	4
5	Extremely uncomfortable	3.03%	1
	Total	100%	33

#	Answer	%	Count
POST SIMUAITON			
1	Extremely comfortable	51.93%	17
2	Somewhat comfortable	48.07%	16
3	Neither comfortable nor uncomfortable	0.00%	0
4	Somewhat uncomfortable	0.00%	0
5	Extremely uncomfortable	0.00%	0
	Total	100%	33

Appendix P: Pain modalities presentation





OTHER CSMC DEPARTMENTS

Poke Plan form has been shared with the staff of the ED, Phlebotomy, IV Team, and the Cancer Center

4NE staff to continue to collaborate with these departments to optimize the successfulness of pokes and decrease the pain and anxiety of everyone involved

PEDIATRIC PAIN MODALITIES

SWEET-EASE (INFANT 6 MONTHS)

Administer at least 2 minutes prior to procedure

Dip the pacifier into the sweet-ease and allow the baby to suck on the pacifier OR use a syringe/dropper to place 2-3 drops into the baby's mouth

Not to be used on infants who are NPO or with suspected GI issues. The high osmolality could potentiate NEC. Also not to be given to soothe a crying baby that is not undergoing a painful procedure

EMLA (6 MONTHS+)

Works best with the natural oils of the skin

Apply a thick layer of cream and cover with a tegaderm for 20-30 minutes. Remove prior to needlestick

Requires a doctor's order

PAIN EASE (7 YEARS AND ABOVE)

Clean and dry the area completely. Hold upright and approximately 4 inches away from the area.

Spray to the area for 4-10 seconds until the skin turns white. Do not frost the skin. Spray immediately before the poke.

Pain ease lasts only up to 60 seconds

Not necessary to reclean the site after applying.

Contraindicated when blood culture is needed

BUZZY (4 YEARS AND ABOVE)

Utilize with ice for ages 4 years and above

May be used on patients 6 months to 4 years for distraction

Leave Buzzy on the spot of the shot itself for 30 seconds

For IV insertion, apply Buzzy proximal to the site

Appendix: Q Poke plan

Today's Date: _____ /_____ / _____ (mm/dd/yyyy)

Poke Plan for (child's name): _____

How would you describe **your/your child's** experience(s) with previous needlesticks/procedures?

☐ no problems ☐ cries ☐ worries ☐ very fearful ☐ no previous experience

Comments: _____

Information:

During a procedure, would you/your child like (check all that apply):

☐ verbal cues

☐ curtain pulled/privacy ☐ count out loud "1, 2, 3" then poke

People: Who would you/your child like to be present?

☐ parent ☐ nurse(s) only ☐ Child Life staff member (if available)

Position: Would you/your child prefer to: ☐ lie flat ☐ sit up ☐ sit with adult caregiver/be held

Watching: Would you/your child prefer to: ☐ watch ☐ not watch

Distraction: Would you/your child like (check all that apply):

☐ bubbles ☐ book ☐ glitter wand ☐ pin wheel ☐ TV/video ☐ none

☐ other (specify) _____

Comfort Measures: Would you/your child like any of these comfort measures? (check all that apply)

For infants: ☐ swaddle ☐ caress ☐ pacifier ☐ sucrose/Sweet-Ease

Children of all ages:

☐ imagery (e.g. my favorite place) ☐ deep breathing ☐ squeezing someone's hand

☐ playing a game (if possible) ☐ my personal comfort item (blanket, stuffed animal)

Would you/your child like any of these comfort measures?

☐ LMX (numbing cream) ☐ Buzzy ☐ Pain-Ease cold spray ☐ Sweet-Ease (infants only)

Additional comments and notes: _____

_____

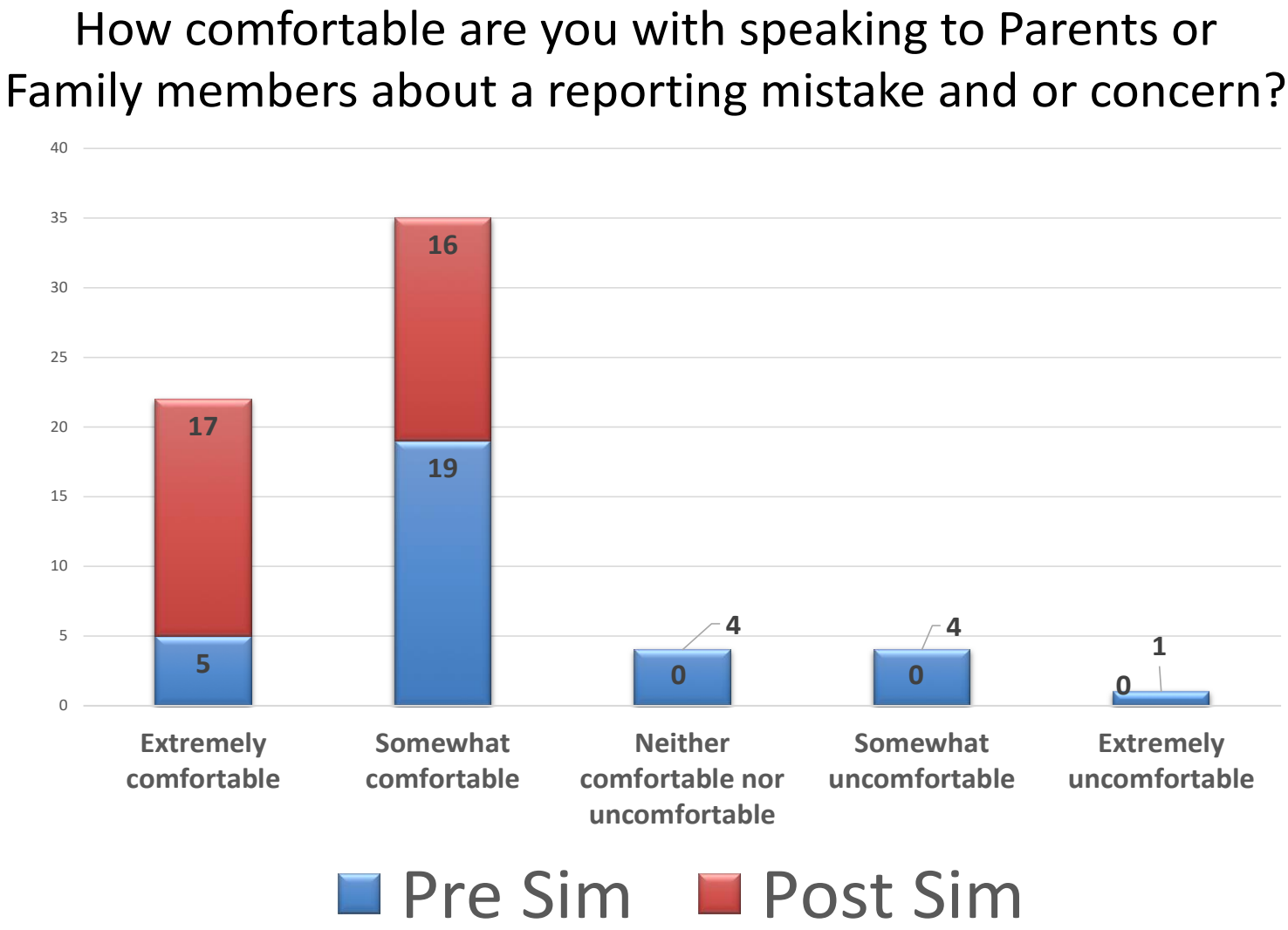
_____

_____

If the poke plan does not result in a successful needlestick with minimal pokes, staff has the responsibility to seek other options to complete the procedure.

Adapted with permission from University of Michigan C.S. Mott Children's Hospital poke program.

Appendix R: Graphical representation nurse survey pre- and post-simulation



Appendix S: Pre- and post-simulation survey results importance

Q - How important do you feel it is to partner with patients, parents, and families?

Pre-Simulation		
Question		Total
Extremely important	86.67%	24
Very important	13.33%	9
Moderately important	0.00%	0
Slightly important	0.00%	0
Not at all important	0.00%	0

Post Simulation		
Question		Total
Extremely important	95.00%	31
Very important	5.00%	2
Moderately important	0.00%	0
Slightly important	0.00%	0
Not at all important	0.00%	0

Note: Out of the 31 participants, only 24 responded or awnsered the opre-survey. Results are included due to relevance to topic .

Appendix T: Personal experience with lack of communication

Do you have personal experience as a patient (or family member of a patient) where you felt that the care team lacked skills in communication?

Q3 - Do you have personal experience as a patient (or family member of a patient) where you felt that the care team lacked skills in communication?

#	Answer	%
1	Definitely yes	59.09%
2	Probably yes	29.55%
3	Might or might not	0.00%
4	Probably not	0.00%
5	Definitely not	11.36%
	Total	100%

60 % of nurses surveyed had had a personal experience either as a patient or as a family member with lack of communication in their care team.

Appendix U: Open-ended feedback

Note: The comments below are actual unedited responses from participants, any mis-spellings are those of the participants.

Q - What other skills do feel you would like to continue to develop in order to communicate more effectively?

What other skills do feel you would like to continue to develop in order to communicate more effectively?
How to use child life when there is no child life at night. Really helpful
I loose my words and want to write down good ways to respond to families who are frusterated with communication issues with the care team, namley the residents.
more role playing, this helps alot
end of life and talking to difficult parents and difficult times.
conflict skills, what if they are mad?
md rn communication
Discussing things in basic terms versus medical jargon
great verbage/ words to use with patient and parents to de escalate situations and explain i.e when iv blows, infiltrates
some more appropriate words to sub out that explain procedures better for patients and families
courtesy, listening skills
SBAR reporting, thank you for doing this for us
What resources available to help families, I want to be able to share more information

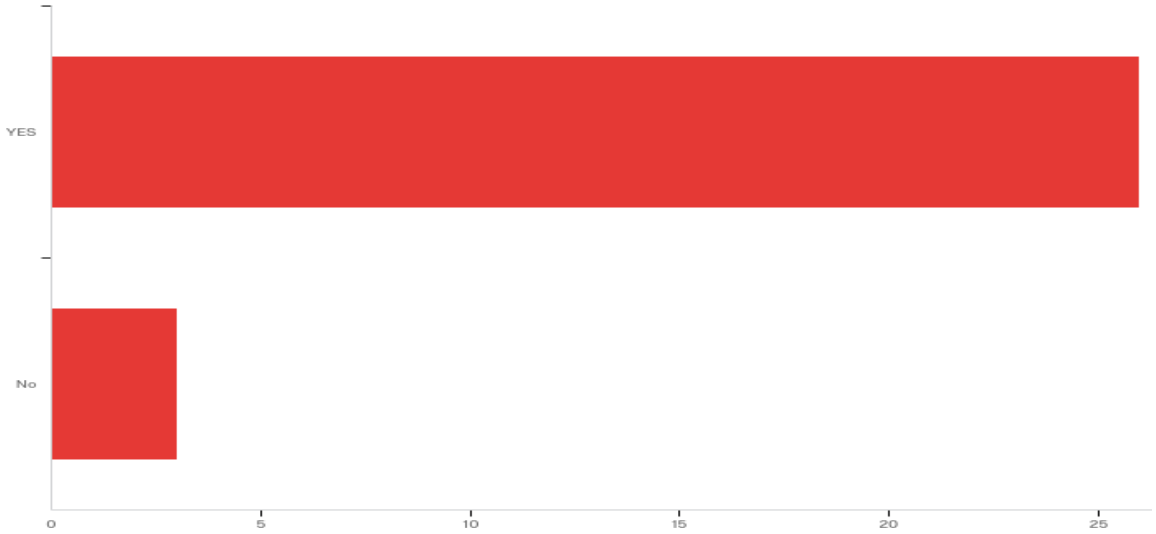
Continued from previous

What other skills do feel you would like to continue to develop to communicate more effectively?
"How to use child life when there is no child life at night. Really helpful".
"I lose my words and want to write down good ways to respond to families who are frustrated with communication issues with the care team, namely the residents".
"more role playing, this helps a lot".
"end of life and talking to difficult parents and difficult times".
"conflict skills, what if they are mad"?
"md rn communication, SBAR reporting, thank you for doing this for us".
"Discussing things in basic terms versus medical jargon"
"great verbiage/ words to use with patient and parents to de-escalate situations and explain i.e. when iv blows, infiltrates".
"some more appropriate words to sub out that explain procedures better for patients and families".
"courtesy, listening skills What resources available to help families, I want to be able to share more information".

Appendix V: Graphical representation of benefit

Q - Do you feel that future Simulation can benefit from having Patients, Families and or Parents participate in Simulation?

#	Answer	%	Count
1	YES	89.66%	28
2	No	10.34%	5
	Total	100%	33



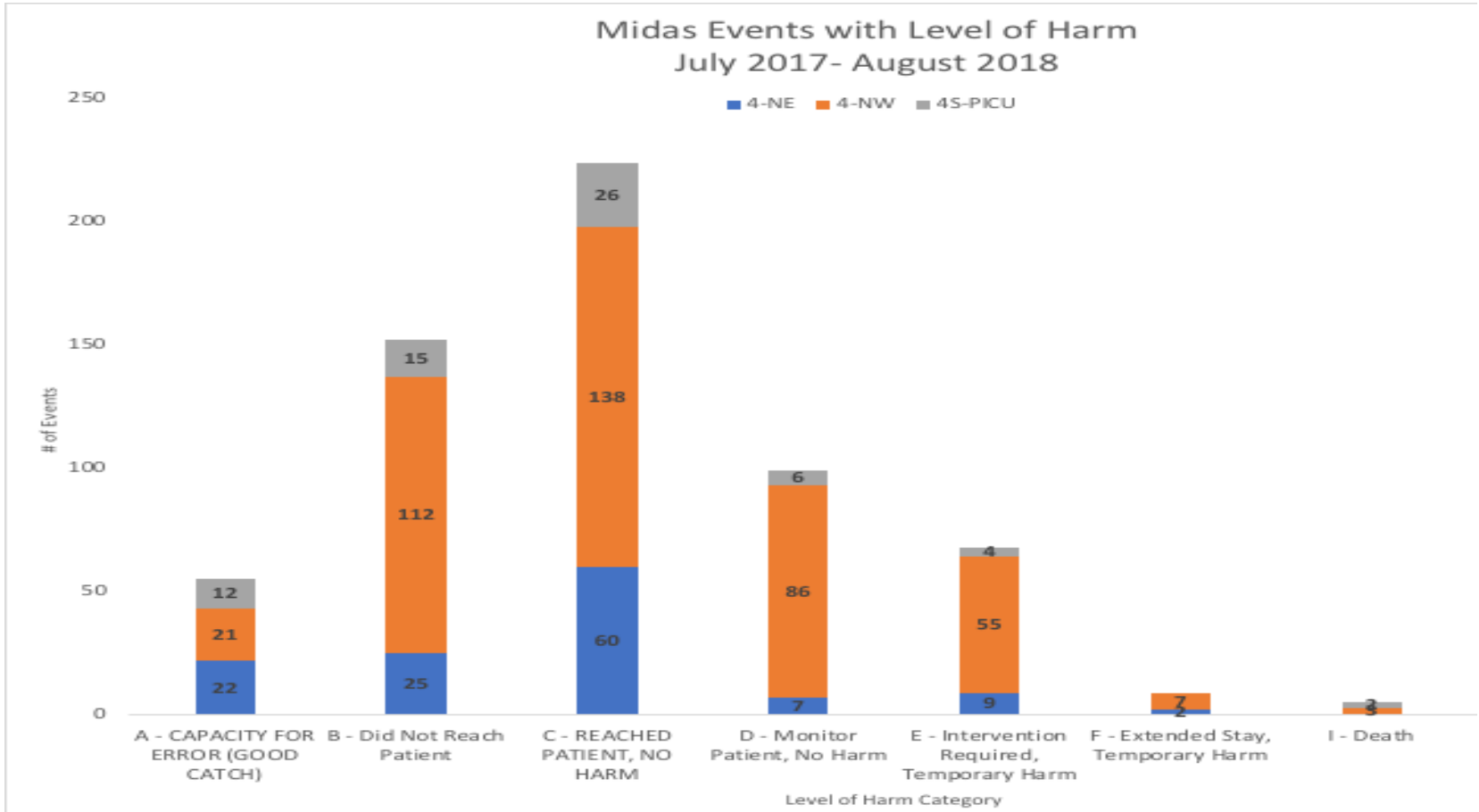
Appendix W: Open ended feedback

Note: The comments below are actual unedited responses from participants, any mis-spellings are those of the participants.

Q - Any other Feedback?

Any other Feedback?
great sim, having a parent present is extemely useful/helpful
Glad to be here, I bet the other people in units are jelous. Thank you for investing in us
Thank you to our families and all who shared their personal stories.
I was shocked to hear my colleagues had similar experiences and lack of confidence like me.
I didn't know what they were trying to get me to realize and I think this may be the same thing that is happening in the unit with my patients.
I love the sim, the baby was a little creepy
Thank you to the parents who came out to help us they care a lot
Next bring kids or teens in I want to know what they think.

Appendix X: Table 5 safety reporting "MIDAS" events with harm reported



Actual Events compared to Near Miss Events: *Orange- Non -Participant Unit (Control Unit).* Blue & Gray - Participant Units

Reporting events that are categorized as **Good catch & Near Miss**

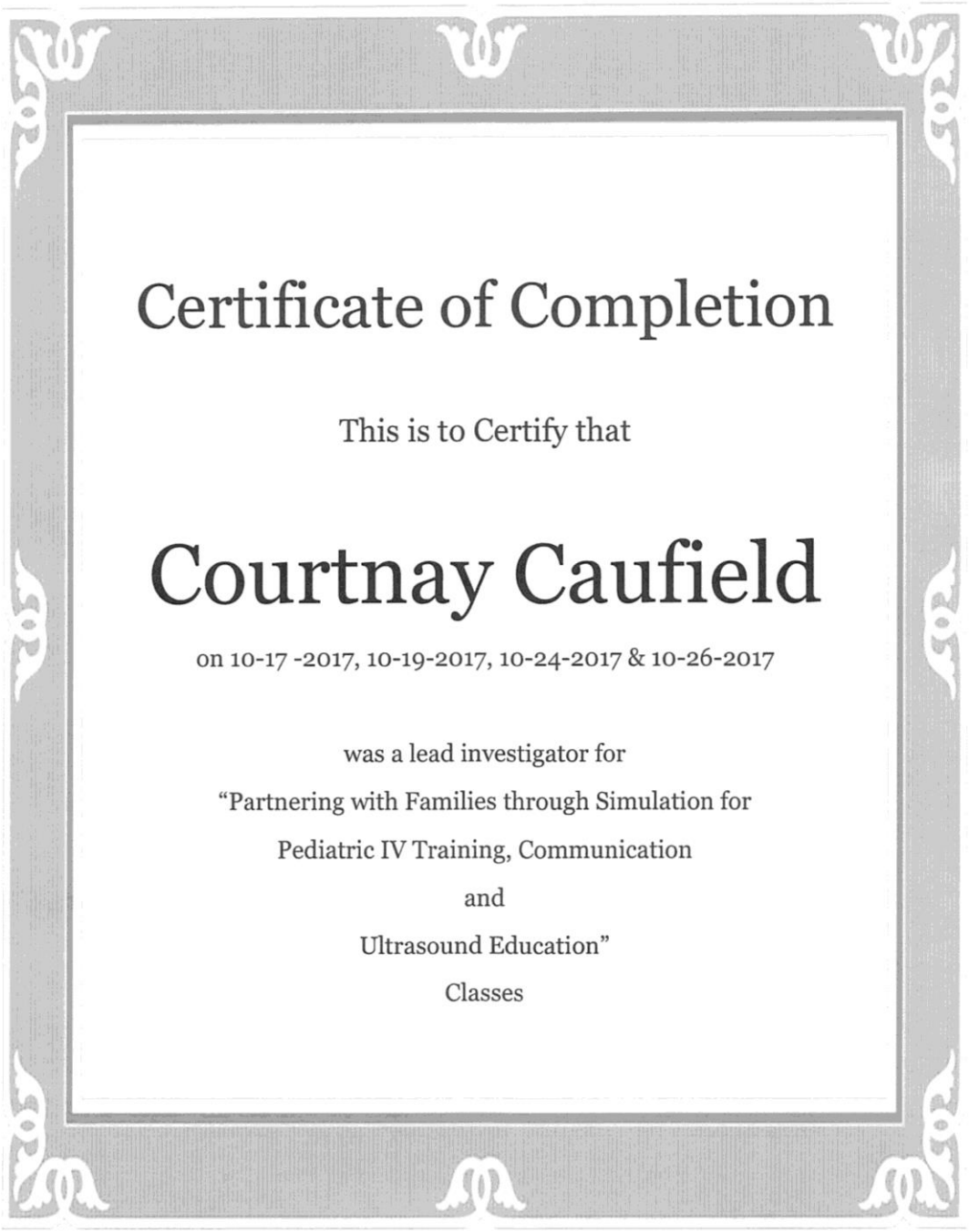
Appendix Y: Data analysis of variables in simulation evaluation

	Variable Name	*Brief Description*	*Data Source*	*Possible Range of Variables*	*Level of Measurement*	*Time for Collection*	*Statistical Test*
1	Communication question 1 Pre-Intervention	Comfort with Patient Communication	How comfortable are you with involving patients in care planning communication?	0-10	Ordinal	Before each simulation	Mode Range, Rank
2	Communication question 2 Pre-Intervention	Comfort with Family and or Parent Communication	How comfortable are you with involving families in care planning communication?	0-10	Ordinal	Before each simulation	Mean Mode Range Rank
3	Adequacy question 1 Pre-Intervention	Perception of sufficient training	How do you rate your proficiency in involving patients in their care planning conversations	0-10	Ordinal	Before each simulation	Mean Mode Range Rank
4	Adequacy question 2 Pre-Intervention	Perception of sufficient training	How do you rate your proficiency in involving family members in patient care planning conversations	0-10	Ordinal	Before each simulation	Mean Mode Range Rank
5	Communication question 1 Post Intervention	Comfort with Patient Communication	Post simulation training: How comfortable are you with involving patients in care planning communication?	0-10	Ordinal	After each simulation	Mean Mode Range Rank

	Variable Name	*Brief Description*	*Data Source*	*Possible Range of Variables*	*Level of Measurement*	*Time for Collection*	*Statistical Test*
6	Communication question 2 Post Intervention	Comfort with Family and or Parent Communication	Post simulation training: How comfortable are you with involving families in care planning communication?	0-10	Ordinal	After each simulation	Mean Mode Range Rank
7	Adequacy question 1 Post Intervention	Perception of sufficient training	Post simulation training: How do you rate your proficiency in involving patients in their care planning conversations	0-10	Ordinal	After each simulation	Mean Mode Range Rank
8	Adequacy question 2 Post Intervention	Perception of sufficient training	How do you rate your proficiency in involving family members in patient care planning conversations	0-10	Ordinal	After each simulation	Mean Mode Range Rank
9	Qualitative Data Post Intervention	Learning Needs	What new skills in communication did you obtain from the simulation training	Open ended	Qualitative data	After each simulation	List
10	HCAHPS Questions	Patient Perception Survey CHILD HCAHPS	How well did the nurse communicate with you (Parents)	0-10, %	Nominal, Ordinal	Quarterly 07-01-2018 Through 06-31-2018	Mean Mode Range %

	Variable Name	*Brief Description*	*Data Source*	*Possible Range of Variables*	*Level of Measurement*	*Time for Collection*	*Statistical Test*
11	HCAHPS Questions	Patient Perception Survey CHILD HCAHPS	How well did the nurse involve your child in their care?	0-10, %	Nominal, Ordinal	Quarterly 07-01-2018 Through 06-31-2018	Mean Mode Range %
12	HCAHPS Questions	Patient Perception Survey CHILD HCAHPS	How well did the nurse involve your Teen in their care?	0-10, %	Nominal, Ordinal	Quarterly 07-01-2018 Through 06-31-2018	Mean Mode Range %
13	HCAHPS Questions	Patient Perception Survey HCAHPS	How well did the nurse communicate with you Adult patients?	0-10, %	Nominal, Ordinal	Quarterly 07-01-2018 Through 06-31-2018	Mean Mode Range, %
14	HCAHPS Questions	Patient Perception Survey HCAHPS	How well did the healthcare team explain things in a way that you could understand?	0-10, %	Nominal, Ordinal	Quarterly 07-01-2018 Through 06-31-2018	Mean Mode Range, %
15	HCAHPS Questions	Patient Perception Survey CHILD HCAHPS	How well did the healthcare team treat you with dignity and respect?	0-10, %	Nominal, Ordinal	Quarterly 07-01-2018 Through 06-31-2018	Mean Mode Range, %

Appendix Z: Certificates for participation, lead trainer and participants



Certificate of Completion

This is to Certify that

Courtnay Caufield

on 10-17 -2017, 10-19-2017, 10-24-2017 & 10-26-2017

was a lead investigator for
"Partnering with Families through Simulation for
Pediatric IV Training, Communication
and
Ultrasound Education"
Classes

Certificate of Attendance

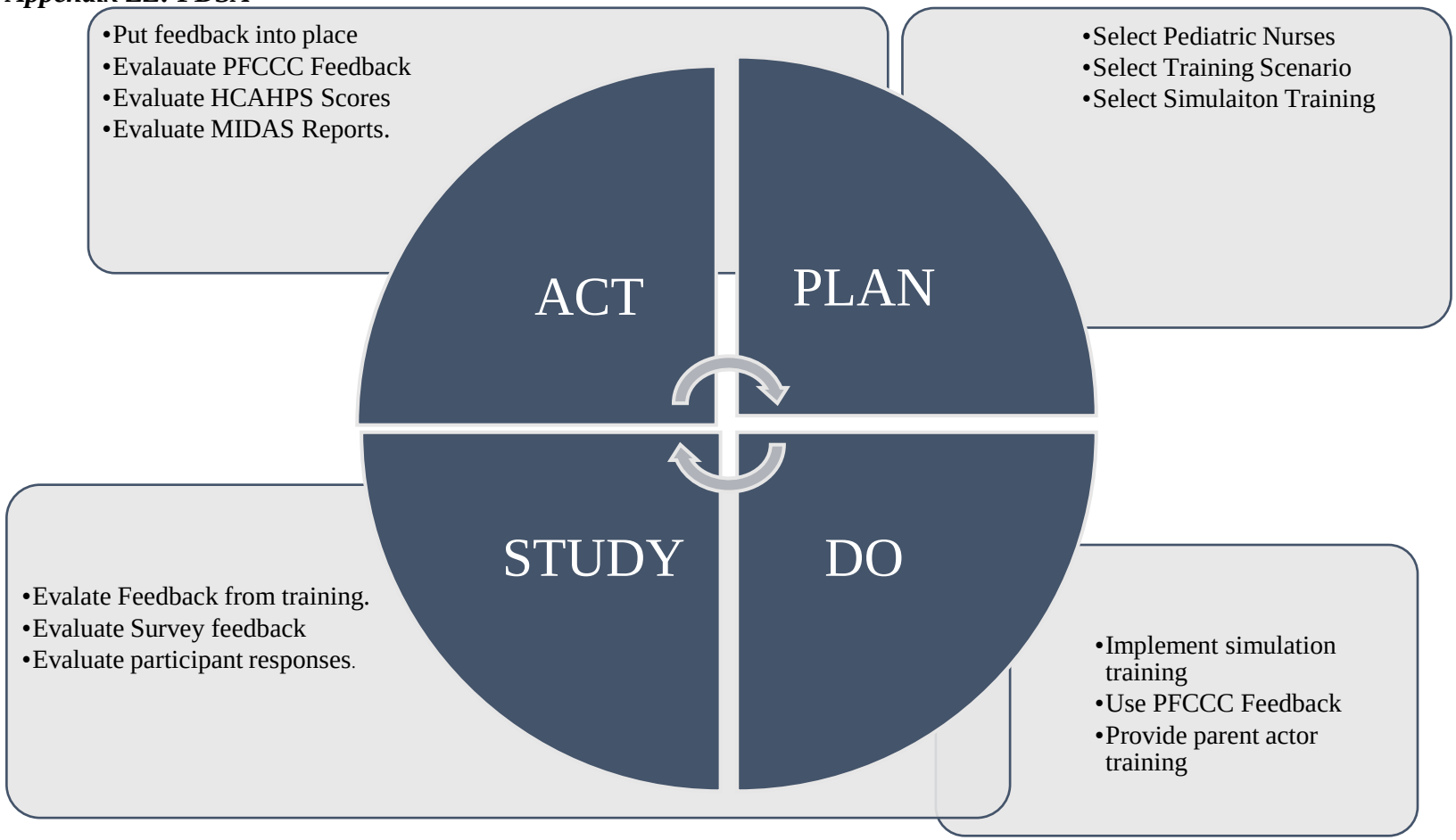
This is to Certify that

Courtnay Caufield

on 10-17 -2017

has completed the "Partnering with Families through Simulation for Pediatric IV Training, Communication and Ultrasound Education" Class

Appendix ZZ: PDSA



Appendix ZZZ: Model for Improvement. Institute for Healthcare (IHI) Model for Improvement.

Appendix ZZZZ: Continuous quality improvement framework model