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Improving Patient Safety through Patient Safety Aide (Sitter) Competency Education

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Improving Patient Safety through Patient Safety Aide (Sitter) Competency Education

by

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Abstract

Healthcare facilities today are faced with many difficult patient care and safety challenges. In addition to providing immediate complex patient medical needs, healthcare staff must ensure patients are in a safe environment. Patient safety has become a major focus of many medical and long-term care facilities. An in-house reporting system of a medium size medical healthcare facility identified a patient safety issue. Multiple patient safety sentinel events have been reported; namely patient elopements (unauthorized missing patients) and high-risk patient falls. Certified nursing assistants were contracted to sit with these high-risk patients to alleviate these patient safety issues; nevertheless, these patient safety sentinel events have continued. An investigation identified these contracted certified nursing assistants needed more appropriate training to provide patient safety for high-risk patients. A two-day patient safety aide (sitter) training orientation and competency validation program to include a full day of Prevention and Management of Disruptive Behavior (PMDB) training was designed, developed, and implemented; retitling the role from sitters to patient safety aides. To evaluate the effectiveness of the program, all contract agency patient safety aides completed a descriptive pre-survey before participating in the training orientation and competency validation program followed by a post-survey after completing the program. A random selection of 132 facility staff completed a retrospective pre and post patient safety aide evaluation two months following the full implementation of the patient safety aide training program. Facility level outcomes analysis of monthly patient fall and elopement incidents three months before and three months after the program implementation. Following the program, patient safety aides (sitters) reported feeling

significantly more prepared than before the training intervention ($p < .001$). The staffs' perception on the sitters' level of preparedness improved by nearly 38% after the training intervention. Patient fall rates showed a marginal but steady decline with a 54% decrease in patient falls in the presence of patient safety aides (sitters) and a 38% monthly average decrease after the training program intervention. Patient elopement rates showed a marginal but steady decline. High-risk patient safety skills training and competency education for patient safety aides (sitters) clearly identified roles, duties, functions, and responsibilities; resulting in cost-effective, proficient high-risk patient safety care.

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Improving Patient Safety through Patient Safety Aide (Sitter) Competency Education

Introduction

Many healthcare facilities today are using sitters, volunteers, care attendants, or patient companions who are not properly trained to provide patient safety care (Tzeng & Yin, 2007; Tzeng, Yin, & Grunawalt, 2008). This lack of training in sitters has generated increasing concerns regarding their abilities to provide safe inpatient care environments. Additionally, the cost of having sitters in some healthcare facilities have been reported as high as $1.3M, leaving the total cost burden for the facility to absorb as these costs are often not covered by third party payers (Rochefort, Ward, Ritchie, Girard, & Tamblyn, 2011). With such high costs for having a sitter program to provide patient safety, it would be cost-effective to maximize these sitters' effectiveness by providing them standardized training.

Providing safe inpatient environments has been one of the major focuses of the National Patient Safety Goals since 2007 (Waszynski et al., 2013). Patients are often categorized as high-risk because they are prone to falls, dislodging dependent medical devices, increased confusion, combativeness, and becoming disruptive. Other high-risk patient factors include high medical acuity and instability, communicated suicidal or homicidal ideations, involuntary commitment, and elopement risk. In addition to medical and behavioral use of sitters, there are also a number of mental health conditions (dementia, delirium, substance abuse, schizophrenia, and mania) that require sitters (Rochefort et al., 2011). Although the primary use of sitters is to provide one-to-one and direct patient safety monitoring, sitters have often been used to supplement staffing

shortages. Sitters are frequently assigned to more difficult and needy patients who are not necessarily high-risk so staff can provide care to other assigned patients.

Problem Background and Significance

With an ever-increasing role for caregivers to provide patient safety care, it is imperative to develop and implement a skills training and competency assessment validation program so that caregivers designated to sit with high-risk patients for protection are provided with the tools to effectively do the job. The lack of a standardized skills and competency assessment validation program may lead to poor patient safety outcomes related to inconsistent patient safety monitoring as sitters are left to figure out how to handle high-risk patient behaviors on their own. Training must be provided by the facility on facility equipment so sitters know how to properly operate equipment when performing high-risk patient care. This change in practice in developing and implementing a sitter skills training and competency assessment validation program will provide sitters with the knowledge, skills, and tools to effectively provide patient safety care and maintain a safe patient environment. Skills training will give sitters clear expectations of job duties, functions, and responsibilities. This may also help alleviate role confusion between facility staff and sitters while maximizing the cost effectiveness of the facility's sitter program.

As part of patient safety, it is imperative the skills training include the prevention of patient elopement and falls of high-risk patients. Patient elopements increase the risk exposure for multiple injuries to include falls. Patient falls can result in significant injury, increased length of stay, unexpected treatment, increased healthcare costs, loss of independence, and even death (Hagland, 2014). According to the Centers for Disease

Control and Prevention (CDC, 2012), 25% of all falls contribute to debilitating injuries, such as broken bones or serious head injuries. Over one-half a million falls occur annually in hospital settings, which result in approximately 150,000 injuries and costing hospitals an average of $17,627 per event (Enseki, 2013; Moudouni & Phillips, 2013). Even falls without injury can be devastating resulting in the patient's fear of falling again (fallophobia), which can lead to inactivity comorbidities, diminished strength, decreased agility, and balance issues (Anderson, Dolansky, Damato, & Jones, 2015). Eighty percent of all patient falls occur in hospital rooms, mostly resulting from patient's attempting to get out of bed, walking, and climbing over side rails. An average of 11% of falls occurs in the bathroom (Enseki, 2013; The Joint Commission (TJC), 2014, 2015).

Problem Background Description

Currently, at this author's facility, contracted sitters are only given a one–day orientation in which facility rules, policies, and work behaviors are reviewed; and the logistics of on-site parking, where and how assignments are made, how to complete and maintain timesheets for payroll, and the process in how to obtain identification badges are covered. This one–day sitter orientation concludes with a facility tour of the various units where individuals may be assigned as sitters. No skills training orientation or competency assessment validation has been provided for these outsourced contract sitters to measure their experience level or proficiency in handling high-risk patient behaviors.

This lack of skills training orientation and competency assessment validation has led to multiple issues related to inconsistent monitoring of high-risk patients. These sitters are left to figure out for themselves how to handle high-risk patient behaviors, provide patient safety care, and monitoring. Because sitters are assigned to different unit

settings (medical-surgical units, intensive care units, psychiatric lock-down units, emergency department, and long-term care units), the sitter may be even more confused about providing high-risk patient safety care based on the unit's specific population needs. Some sitters are newly certified nursing assistants, while others come from various backgrounds with more experience. These different levels of experience, knowledge, and skill sets contribute to the inconsistent approaches in how a sitter provides high-risk patient safety monitoring and care.

Problem Recognition

After reviewing the problems and issues related to the sitter program at Durham Veteran Affairs Medical Center (DVAMC), it was clear that a coordinated effort was necessary to provide some structure for the outsourced contract sitters. The main problem with the DVAMC's sitter program was that it did not provide skills training orientation and competency assessment validation. There were inconsistencies among sitters in how they provided high-risk patient safety monitoring and care. In addition, different unit specific requirements and needs in monitoring high-risk patients made it confusing for sitters to provide appropriate patient safety care. These problems not only created role and duty confusion for an untrained group of sitters but generated frustrations related to the inconsistent delivery of high-risk patient safety care experienced by DVAMC staff.

Problem Statement

The current sitter program at DVAMC does not provide skills training orientation and competency assessment validation, which results in inconsistent patient safety care and staff confusion and frustration.

Problem Literature Review

A literature review was conducted through the University's Bulldog OneSearch search engine and through the Durham Veterans Administration Medical Center Medical Library search engine, using keywords: sitters, care attendants, patient safety, patient safety training.

Training for Care Attendants

Coffey (2004) designed a qualitative study which explored the perceptions of nurses and care attendants regarding the necessity of providing formal training for care attendants caring for older people because many care attendants are untrained and unregulated. Participants of this study were all voluntary and comprised of 40 nurses and 40 care attendants from two long-term care public hospitals for older people in southern Ireland. This study began with a focus group discussion of eight participants for data collection to design a questionnaire for the study. The focus groups were selected based on occupation homogeneity but varied enough allowing contrasting opinions. The focus group discussion comprised of broad open-ended questions eliciting the focus group members' experiences, opinions, and issues related to their knowledge, education, and role in patient care, and their relationship with nurses if they were care attendants, and their relationship with care attendants if they were nurses. An additional question was asked to both nurses and care attendants regarding their thoughts on nurse involvement in the care attendant training and rationale of their answer.

The results of the focus group sessions led to the development of four open-ended questions: attitudes towards care attendants' training, perceptions of their role, the positive and negative implied consequences of training care attendants, and impact on

patient care. A pilot sample questionnaire was given to two nurses and two care attendants that led to minor revisions before it was distributed to the 20 nurses and 20 care attendants at each study site (Coffey, 2004). Responses from these nurses and care attendants were manually categorized, coded, and interpreted. Responses from both sites were compared and similar patterns resulted forming three main themes: attitudes in training care attendants, perceived links between training and role ambiguity, and nurse involvement in training. The results in the area of attitudes to training care attendants were positive from both nurses and care attendants as both agreed that competency-based training correlated to quality patient care and an opportunity for improvement. The results in the area of perceived links between training and role ambiguity exhibited significant differences in opinions between nurses and care attendants. Nurses expressed a fear of the blurring of role boundaries by the care attendants in that care attendants may want to do more or assume more responsibilities; thus practicing out of their trained scope; while care attendants fear that nurses may want to decrease their workload by putting more onto them (Coffey, 2004).

Perceived links between training and role ambiguity was further complicated by mixed perceptions of nurses who felt care attendants being responsible for more patient care duties and functions would allow them to do more nursing duties. Some care attendants expressed using this training as an opportunity for expected advancement and promotion. In the area of nurse involvement in training care attendants, it was practically unanimous in care attendants wanting on the job training. It was agreed by both nurses and care attendants that this training should be within some standardized format under the guidance of a regulatory board. Nurses in the study were not interested in being the job

trainers (62%), because of their already heavy workload while others felt they were not qualified to teach and should be handled by a different source (Coffey, 2004).

This study identified that nurses' and care attendants' advocating for care attendant training and further support patient quality care. It also identified the need for role clarification as training may mislead care attendants to overstep their professional practice functions; but also suggests that training provides an opportunity for job and role clarity. This study supports the importance of standardized care attendant training of job skills and function and role description clarification.

Family Visitors, Sitters, or Volunteers to Prevent Inpatient Falls

Tzeng & Yin (2007) published a descriptive cross-sectional study that explored the purpose, roles, and activities of family members and their personal experiences of their loved ones while hospitalized in an acute inpatient care setting in Taiwan. There were two sample groups used for this study, a convenience sampling of 51 senior nursing students and a family member and neighbor of each student. A one-page questionnaire was designed with Confucianism value-based society principles and was piloted on 10 senior nursing students to examine Mandarin language wording clarity before it was used on 102 family member /neighbor participants. Of these, 99 (97.1%) had at least one personal experience of their loved ones hospitalized in an acute inpatient care setting (Tzeng & Yin, 2007).

The study illustrated that 87.9% of the roles of these personal aides or patient family members were to provide physical patient care, while 80.8% provided psychological support, and 60.6% would serve as patient advocate communicating to physicians and nurses of their love ones' needs. Through the study, four most common

reasons for having a personal aide for their loved ones were: it was perceived as the family members' responsibility (76.8%), coming to help voluntarily (66.7%), showing familial piety and parental devotion (43.3%), and fear that their hospitalized family member would not receive proper care (39.4%). Following closely behind the four most common reasons were specific request by their loved ones to have an aide (9.1%) and requested by physician and nurses (5.1%) (Tzeng & Yin, 2007).

The authors concluded that because family members or privately hired aides lack professional training and skills, patient safety is often compromised. These deficient, inconsistent, and variable levels of experience, capabilities, and skills of the patients' family members or hired aides can have negative impact on patient outcomes. The study uses a questionnaire design using a Confucianism value-based society approach that is very specific to Asian culture and probably more specific to Taiwanese culture (Tzeng & Yin, 2007). This limits generalizability in U.S. healthcare settings.

Nurse Assessment of Sitters in Inpatient Care Settings

A retrospective study evaluated whether the Patient Attendant Assessment Tool (PAAT) was useful in managing the use of sitters and if the use of sitters led to fewer patient falls (Tzeng et al., 2008). The effectiveness of PAAT was based on three outcome indicators: use of sitters, number patient restraints ordered, and total number of patient falls and falls that resulted in patient injury per 1,000 patient days. This study was a pilot project conducted on two 32-bed acute adult medical units with similar skilled staffing pattern mix in a Michigan, USA hospital from October 1, 2006 to February 28, 2007. The study obtained its data from three sources. The first data source came from a study of the units' monthly reports of five different areas: number of restrain use, number

of sitter requests, number of sitters used and for how many shifts, registered nurse hours per patient day, and total nursing hours per patient day. The second data source came from the National Database of Nursing Quality Indicators (NDNQI) quarterly reports of each study unit on the number of patient injuries sustained from falls versus the number of total falls per 1,000 patient days. The third data source came from the PAAT reports which are comprised of five risk factors and different alternative nursing interventions to implement before the use of assigning a patient sitter. A calculated PAAT score of a four or greater by the clinical nurse would suggest the use of a patient sitter. A total of 417 completed PAATs from Unit One and 545 from Unit Two were analyzed separately and compared for validation purposes (Tzeng et al., 2008).

Based on descriptive and inferential statistics, Unit One had an average of 6.49 registered nurse hours per patient day, that is 0.47 hours more compared with Unit Two who had an average of 6.02 and there was no statistically significance between the two units according to the *t*-test of 2.78 and a *p*-value of 0.01. The results of the post PAAT study data showed that Unit One had a decrease in restraint use, improved rate in the number of sitters requested and used, increase in injuries related to falls, and increase in registered nurse hours and in total nursing hours per patient day. The results of the post PAAT study data for Unit Two showed that only the rate in number of sitters requested and use improved with everything else unchanged. There was a positive correlation on Unit One when sitters requested and used increased, patient restraint use decreased; and when total nursing hours per patient day increased, patient falls decreased. However, for Unit Two, there was a positive correlation in a higher total patient falls rate when sitter requests and use increased. When more staff and sitters were used to share patient safety

and care responsibilities, there was an increase in negative patient safety outcomes, suggesting a strong possibility of fragmentation in patient care delivery and safety provision (Tzeng et al., 2008).

These results suggested a need to clarify the job responsibilities, functions, duties, and roles between licensed and non-licensed nursing (sitters). This is especially true since the responsibility of reducing the risk of patient injuries and providing a safe patient environment is often viewed by nursing administration and nursing practice as a commonly shared patient safety goal (Tzeng et al., 2008).

Problem Literature Review Summary

Up to date, only very elementary studies and literature exist like that in the Coffey (2004) study that explores the perceptions, pros and cons, and issues related to training care attendants in Ireland. Tzeng and Yin (2007) study, clearly illustrates how cultural, ethnic, and religious values impact the use and expectation of patient family members in Taiwan to be sitters or for patient family members to privately hire patient aides for their hospitalized loved ones. In Tzeng et al. (2008) study, a Patient Attendant Assessment Tool (PAAT) design was developed to provide guidance to clinical nurses in determining whether a patient needs a sitter or not and its effectiveness in application.

Many healthcare facilities spend millions of dollars a year for sitters to provide patient safety care without any formal or professional training. The literature review identified this practice not only in the United States but also to other parts of the world like Ireland and Taiwan; thus globally. This suggests the need to develop a comprehensive solution for sitter competency.

Needs Assessment

Informal interviews, discussions, and surveys with over 300 random staff members (registered nurses and certified nursing assistants) on day, evening, night, weekend, and holiday shifts on four different medical-surgical units, three different intensive care units, two psychiatric lock-down unit, four long-term care units including hospice unit, and emergency department were conducted by the author between January 10, 2015 to February 12, 2015 at DVAMC. Casual discussions were also conducted with facility unit managers, executive leadership team members, contract agency sitters, and contract agency management. The top three issues expressed from registered nurses were: (1) some sitters are good while others are lazy and just sit there doing nothing, (2) a lot of sitters will not sit or refuse to sit with psychiatric patient or patient with psychiatric issues, and (3) the sitters don't document the patient observation sheets. The top three issues expressed from certified nursing assistants were: (1) the sitters don't change or bathe patients, (2) the sitters don't take vital signs or take blood sugars, and (3) the sitters always need help turning and lifting patients when there is lift equipment in every room. The top four issues expressed by sitters were: (1) confusion about job responsibilities, (2) not given report on what needs to be done for the patient, (3) once assigned to the patient, nurses never come back to check on the patient, not even when the shift is over, and (4) there is no skills training or patient education for sitters.

Population/Community

The project site is a 271-bed level 1 tertiary care referral, teaching, and research medical facility comprised of 151 acute beds and 120 community care beds located in Durham, North Carolina (Durham VA Medical Center, 2016c). This medical facility has

over 750 nursing staff to include Advanced Practice Nurses, Registered Nurses, and Licensed Practical Nurses, along with Executive Nurses, Nursing Assistants, and support staff serving more than 200,000 veterans living in a 26-county area of central and eastern North Carolina (Durham VA Medical Center, 2011; 2016a).

Stakeholders

Key stakeholders for this project include the contract agency sitters, nursing staff, certified nursing assistants, and unit managers. Other stakeholders are the executive leadership team, risk management, patient advocacy, nursing education, and especially patients and their family members who will benefit from increased patient safety.

Organizational Assessment

Vision statement. Veteran Health Administration will continue to be the benchmark of excellence and value in health care and benefits by providing exemplary services that are both patient centered and evidence based. This care will be delivered by engaged, collaborative teams in an integrated environment that supports learning, discovery and continuous improvement. It will emphasize prevention and population health and contribute to the nation's well-being through education, research and service in National emergencies (Durham VA Medical Center, 2016a).

Mission. Honor America's veterans by providing exceptional health care that improves their health and well-being (Durham VA Medical Center, 2016a).

Mission statement. To fulfill President Lincoln's promise "To care for him who shall have borne the battle, and for his widow, and his orphan" by serving and honoring the men and women who are America's Veterans (Durham VA Medical Center, 2016b).

Core values. The five core values underscore the obligations inherent in the VA mission: Integrity, Commitment, Advocacy, Respect, and Excellence (I CARE).

- Integrity: Act with high moral principle. Adhere to the highest professional standards. Maintain the trust and confidence of all with whom I engage.
- Commitment: Work diligently to serve Veterans and other beneficiaries. Be driven by an earnest belief in VA's mission. Fulfill my individual responsibilities and organizational responsibilities.
- Advocacy: Be truly Veteran-centric by identifying, fully considering, and appropriately advancing the interests of Veterans and other beneficiaries.
- Respect: Treat all those I serve and with whom I work with dignity and respect. Show respect to earn it.
- Excellence: Strive for the highest quality and continuous improvement. Be thoughtful and decisive in leadership, accountable for my actions, willing to admit mistakes, and rigorous in correcting them (Durham VA Medical Center, 2016b).

SWOT analysis. Strengths include the full support of the executive leadership and middle management (unit managers) of the organization. Additional strengths include the supportive culture that exists on the medical units and its staff, designated funding specifically for agency sitter contract, and no additional cost of project implementation. Weaknesses consists of no contract agency sitter training program established, lack of dedicated contract agency sitter program coordinator, focus on results rather than contract agency sitter training, work culture change among staff, and over 10 different patient care unit environments wanting different sitter needs. Opportunities are

comprised of available outside resources to include contracted agency is supportive and willing to assist, Duke University Medical Center's Elder Care in Hospital (ECHo) program for dementia patients, and sitter program resources from other hospital facilities. Threats consists of congressional budget cuts or reduction in funding for contract agency sitter program, lack of support from contracted agency, and healthcare reforms regarding patient safety care or regulating sitter competencies. (Figure 1)

Strengths • Full support of Executive Leadership • Full support of middle management (Unit Managers) • Supportive culture on unit and staff • Designated funding specifically for agency sitter contract • No additional cost of project implementation	Weaknesses • No contract agency sitter training program established • Lack dedicated contract agency sitter program coordinator • Focus on results, as opposed to sitter training • Work culture change • Over 10 different patient care unit environments wanting different sitter needs
Opportunities • Contracted agency is supportive and willing to assist • Duke University Medical Center's Elder Care in Hospital (ECHo) program for Dementia patients • Possible resources available from other hospital facilities	Threats • Congressional budget cuts or reduction in funding for contract agency sitter program • Lack of support from contracted agency • Healthcare reforms regarding patient safety care or regulating sitter competencies

Figure 1. Strengths, Weaknesses, Opportunities, and Threats (SWOT)

Resources. A dedicated person will supervise the patient safety aides (sitters). The supervisor will maintain all patient safety aide (sitter) on-site facility employment folders and coordinate orientation and training for newly hired patient safety aides (sitters). In addition, the supervisor will inspect and ensure all patient safety aides'

(sitter's) annual competencies, certifications, and licensures are current; and assign additional education and skill trainings, in-services, and competencies deemed appropriate. Conference rooms are available for patient safety aide (sitter) training orientation and competency validations. Medical units where staff is available to check patient safety aides (sitters) on specific patient care competency skills. There are dedicated rooms, educational materials, and trainers available for the one-day intensive Prevention and Management of Disruptive Behaviors (PMDB) class.

Theoretical/Conceptual Underpinnings

Nursing services in Durham VA Medical Center embraces the Jean Watson's Theory of Human Caring. The facility's adoption of Watson's theory informs nursing service staff training, guides patient care delivery, and directs the design and implementation of healthcare programs for the veterans served. Jean Watson's theory has also been incorporated in the nursing functional statements guiding nursing practices and behaviors.

Theory

The design, development, and implementation of this project are based on Jean Watson's Theory of Human Caring. Dr. Watson is a nurse theorist whose focus on human caring led her to establish the Theory of Human Caring between 1975 and 1979; and is well known in nursing with a focus on holistic care and often used by nurse educators to teach staff nurses and students (Lukose, 2011). Watson correlates the underpinnings of nursing care to the intersubjective human responses to health-illness, the environmental-personal interactions, one's knowledge of the nursing care process, and the knowledge of self and one's abilities and transaction limitations (Lusk & Fater,

2013; Watson, 2006). The following 10 caritas processes™ provide the foundation of Watson's human caring theory:

1. Formation of a humanistic-altruistic system of values
2. Instillation of faith and hope
3. Cultivation of sensitivity to oneself and to others
4. Development of a helping-trusting human caring relationship
5. Promotion and acceptance of the expression of both positive and negative feelings
6. Systematic use of a creative problem-solving caring process
7. Promotion of transpersonal teaching-learning
8. Provision for a supportive, protective, and/or corrective mental, physical, societal, and spiritual environment
9. Assistance with gratification of human needs
10. Allowance for existential-phenomenological-spiritual focus (Duffy, 2015; Watson Caring Science Institute, 2010)

The project design, development, and implementation were based primarily on three caritas processes: caritas process #4, development of a helping-trusting human caring relationship, caritas process #8, provision for a supportive, protective, and/or corrective mental, physical, societal, and spiritual environment, and caritas process #9, assistance with gratification of human needs. Currently, contracted agency sitters are not provided with the training and tools to provide patient safety care for high-risk patients. Watson's Theory of Human Caring offers a unique framework to guide improved caregiver training, enhance patient safety, and increase staff satisfaction.

Project Design Literature Review

The project design literature review articles were retrieved using keywords: sitter programs and training, healthcare attendant programs and training, patient safety programs and training, high-risk patient safety programs and training, patient safety program designs, patient sitter program designs, constant observation patient programs and designs, and disruptive patient behavior programs and design through the University's Bulldog OneSearch search engine and the Durham Veterans Administration Medical Center Medical Library search engine.

A literature review for best practices in patient safety and to improve sitter skills through training programs revealed limited literature. Instead, there were enormous amounts of literature focused on the prohibitive costs of sitter use, sitter reduction programs, and the exploration of alternative strategies in the use of sitters to provide patient safety care and constant patient observations. Nevertheless, sitters still remain one of the most popular and frequently suggested interventions in providing patient safety with close observations (Laws & Crawford, 2013). In addition, sitter practices are still being reported to vary by hospital, unit, department, and at the care provider level; contributing to unclear, confusing, varying, and fragmented role definition between the staff member providing constant patient safety observation and the assigned primary caregiver (Laws & Crawford, 2013; Richman & Sarnese, 2014).

Lang's (2014) literature review to determine the degree to which sitters prevent falls revealed several published studies showing a correlation between increased sitter use and decreased patient falls. Lang's (2014) literature review also reported no correlation between increased patient falls and decreased sitter use in sitter reduction studies; but did

recognize that alternative fall prevention measures were used in place of sitters. Lang (2014) recommended clear guidelines for sitter use and formal education for sitters regarding their scope of practice, responsibilities, and expectations in the role of a patient safety sitter are established.

In an attempt to decrease sitter use for constant observation by 20% from its 2011 baseline while maintaining patient safety, Kaiser Permanente Santa Rose Medical Center, a 173-bed acute care hospital, developed a multidisciplinary performance improvement group (Laws & Crawford, 2013). This performance improvement group was responsible for developing a proactive approach to identify high-risk patients from those who are confused or delirium diagnosed. The performance improvement group was responsible for developing guidelines to use sitters for constant observation for patient safety. The alternative strategies designed by the group were how to identify high-risk patients which included dementia, agitation, alcohol withdrawal, impulsive and or wandering behaviors, acute mental status changes from baseline, and history of post-operative confusion. This resulted in the development of a delirium screening tip sheet which algorithmically led to behavioral assessment, delirium assessment, environmental management, and creative behavior management guiding medical and nursing staff processes and patient-focused communication and interventions. Lightening screening question rounds were developed for unit hospitalists and nursing staff to conference and round on these probable high-risk patients enhancing the communication process regarding patient safety needs. The post-performance improvement project outcomes recognized the 20% goal reduction in sitter use and 2.5 FTEs with improved patient outcomes. The primary finding was that prevention and early identification of patients at risk for delirium, falls, and behavioral

issues was a more effective strategy for patient safety than placing the patient on constant observations. Another finding was not all high-risk patients can be properly and safely managed with these alternative strategies, but instead guidelines should be established for more appropriate use of sitters and constant patient observations (Laws & Crawford, 2013).

Another study of a medical facility attempting to reduce patient sitter costs resulted in the implementation of a sitter reduction program in critical care, step-down, and medical-surgical inpatient nursing units (Spiva et al., 2012). The sitter reduction program provided tools and training to all health care providers. The tools included an algorithm decision tree for determining sitter need, sitter justification used to request a sitter, an evaluation form to provide end of shift report on the patient in question, letters explaining the sitter program to nurses and physicians, nurse and physician scripting in how to address family and patient in using outside sourced sitters, and a letter for the patient and family with a listing of private home care sitters. The purpose of this study was to reduce patient sitter costs by clearly identifying guidelines in determining the need for a patient sitter by assessing physiological, psychosocial, and pharmacologic causes for the patient's behaviors. The findings of this study revealed the nurses may have lacked the experience, skill, and knowledge to determine appropriate need for sitter use, thus contributing to greater sitter use than necessary (Spiva et al., 2012).

Harding (2010) conducted a sitter reduction program for cost containment in a 140-bed acute care hospital in suburban Massachusetts with 54,000 emergency department visits annually, and implemented an assessment tool to determine patient sitter need. This medical facility used the Morse Fall Score tool to identify high-risk fall

patients and the SAD PERSONS scale in the emergency department to triage patients in psychiatric crisis and their need of a sitter. An observation assistant sitter request form was developed to objectively categorize which patients were at risk and needed a sitter. The results of this implementation revealed the effectiveness of the assessment tools in better identifying those high-risk patients needing sitters and a 42% reduction in the dollar percentage of sitter overtime. The study also revealed the vital need in developing formal educational programs for sitters with clear expectations of their role, function, behaviors, and purpose (Harding, 2010).

The Chester County Hospital, a 220-bed facility in West Chester, Pennsylvania was experiencing operational financial challenges in providing sitters for patient safety in their facility (Coladonato, 2009). An average of 15.5 full-time equivalents (FTE) staff was used to sit with patients, with an unbudgeted cost of $515,480 per year in overtime and agency-hired nursing assistants. This led to the proposal of implementing a new position similar to that of a sitter called patient safety assistant (PSA) who would provide direct patient observation under the direction of a registered nurse. The PSAs would be given an orientation consisting of 6.5 hours of didactic class with an eight hour clinical day. In addition to providing direct patient observations, they would also provide direct patient care to include feeding, bathing, toileting, ambulating, skin assessments, repositioning, linen changes, patient transport to diagnostic exams and procedures, vital signs, recording intake and output, engaging in patient activities, and reporting patient clinical and behavioral changes. As a result, the approved 12.6 FTE PSA positions established through its orientation and training was successful in decreasing overtime costs and maintaining patient safety observations (Coladonato, 2009).

In two other medical facilities, a delirium room (DR) was developed to provide appropriate patient environment for those patients with similar types of delirium (Flaherty & Little, 2011). This alternative patient management model consisted of a four-bed patient room for patients with similar diagnoses. These DR were designed to provide a restraint-free environment with a non-pharmacological approach. The rationale in developing the DR structure was based on the goal of providing constant nursing observation for delirious patients without the use of one-on-one sitters; leaving sitter use for those high risk patients outside of the DR. Based on the observational data, patients admitted to the DR improved function, shorter hospital stay, and reduced mortality, comparable to levels seen in patients without delirium. In the area of patient safety related to falls, the patient falls rate in the DR was no higher than other units. The DR model lacks randomized controlled trials and the inability to identify which component of the model provides its benefit (Flaherty & Little, 2011).

Scripps Mercy Hospital, a 500-bed level I trauma center in San Diego, California designed and implemented a Specialized Adult-Focused Environment (SAFE) unit to help reduce and appropriate sitter use (Nadler-Moodie, Burnell, Fries, & Agan, 2009). SAFE units were designed to group similar patients and those not requiring one-to-one observation closer to the nurses' station or staff member allowing easy patient monitoring, observation, and intervention. All acutely suicidal, high falls risk, agitated, alcohol withdrawal or substance intoxication, volatile and unpredictable behavioral disturbances, and other high-risks patients were excluded from SAFE units as constant observation within arms-length reach must be maintained. This alternative use of sitters was cost-effective (Nadler-Moodie et al., 2009).

Many rehabilitation facilities have used constant observation to keep their patients safe as an alternative to medication and restraints. Bailey, Amato, and Mouhlas (2009) implemented a performance improvement project to improve efficiency of constant observation on a 21-bed brain injury unit in a rehabilitation institute. This improvement project led to the development of the rehabilitation patient companion (RPC) program. The role of the RPC was to provide constant observation and companionship and promote communication skills with brain injury patients throughout their rehabilitation. The RPC received four hours of classroom instruction and 40 hours of clinical training specific to brain injury patients. The RPC orientation also covered patient hygiene, mobility, safety issues, intake and output, observation and reporting, and initiating and supervising group activities. This performance improvement project exhibited benefits for patients, nursing staff, and the organization. With the creation of the trained RPC position, patients on the unit received more cognitive stimulation and customer support staff who became RPCs advanced their skills and contributed more effective direct patient care. There was improved nursing staff satisfaction as the new role of RPCs allowed nursing staff to be more efficient in their patient care functions. This efficient use of nursing staff resulted in improved unit salary expense compared to those units without RPCs while improving patient safety. Consequently, this RPC program illustrated how a creative alternative through role orientation and training to constant observation improves patient care delivery and patient safety (Bailey et al., 2009).

A cross-sectional study conducted by Richman and Sarnese (2014) examined the use of patient sitters in 115 hospitals: non-profit/not-for profit (74.67%), for profit (12%), government (8.67%), psychiatric (0.67%), long term care (0.67%), and other facilities

(3.33%) including university, shared services organizations, and rehabilitation hospitals or centers. Patient sitters were provided in-house in 81.74% and contracted patient sitters were provided in18.26%. The study data also revealed approximately two-thirds (66%) of the time, direct patient observation was provided by a variety of different people in addition to registered nurses and certified nursing assistants. These people included volunteers, psych techs, personal support workers/orderlies, police department, and maintenance. Some facilities have allowed other ancillary staff members and security to be patient sitters for overtime; but not using their title during their sitter role. Study respondents had an opportunity to select more than one answer when asked how often patient sitters have to complete training. It was reported that 72 out of 110 (65.45%) patient sitters were trained on hire, 52 out of 110 (47.27%) have ongoing education, 41 out of 110 (37.27%) were trained once a year, and 5 out of 110 (4.55%) were trained more than once a year. Some organizations included training in basic first aid, BLS/CPR, HIPAA, general safety, restrain, self-defense, and verbal de-escalation techniques. It was also revealed that some sitters had special training specific for their sitter position and training provisions varied from being provided by a company contracted by the medical facility, by the clinical or nursing unit, in-house training and orientation programs, and on-line programs and competencies. Some indicated they also received behavioral health training. These behavioral health training including Crisis Prevention Institute's Nonviolent Crisis Intervention (CPI) (52%), Management of Aggressive Behavior training (MOAB) (28%), Verbal Judo (5%), Handle with Care (3%), Mental Health first Aid (2%), Therapeutic Options (2%), Techniques for Effective Aggression Management

(TEAM) (1%), and 7% did not receive or know the behavioral health training at their facility (Richman & Sarnese, 2014).

Richman and Sarnese (2014) recommended that sitter costs should be charged to the unit using its services. This would help motivate the critical assessment and appropriate use of sitters. Another recommendation is that since there are no current industry standards or guidelines directing the training of sitters, the use of patient sitters, and who can provide this service, it is imperative the facility identifies the task and role of the sitter. These tasks and roles include and not limited to: companionship, feeding, bathing, toileting, ambulating, conversing, clinical interventions, assist with patient restraints, elopement prevention, and observing and reporting clinical and behavioral changes. It is paramount that training must include identification and management of aggressive patient behaviors using a nationally recognized program. This training must be provided before any sitter patient contact and should include role playing and scenarios in areas of verbal and physical signs and symptoms of agitation, de-escalation techniques, strategies in fall and suicide prevention, proper dangerous object/item removal, documentation and reporting process, safe use of appropriate technology and equipment, and how to activate immediate and urgent patient assistance. In addition, the facility must have clear policies, procedures, and protocols guiding the training, management, and use of sitters, criteria in ordering, reviewing, and discontinuation of sitter use (Richman & Sarnese, 2014).

A study of 75 hospitals participating in the Hospital and Healthsystem Association of Pennsylvania Hospital Engagement Network (PA-HEN) Falls Reduction and Prevention Collaboration revealed a statistically significant correlation between

lower patient fall rates with injury and the use of sitter program associated with specific sitter program design (Feil & Wallace, 2014). As part of the Collaboration, a falls Self-Assessment Tool (SAT) survey was completed by all 75 hospitals. The falls SAT survey was designed to evaluate the hospital's current structure and content of their falls prevention programs compared with evidence-based, best-practice guidelines; and assist them in identifying those missing best-practice elements or those in need of improvement. Participants were asked to report their levels of implementation; whether they had fully, partially, or not implemented individual falls prevention practices and falls prevention program elements across 17 falls prevention practice categories. In these 75 participating hospitals, 48 reported having sitter programs. Of the 48 hospitals having sitter programs, 21 reported full implementation identifying six specific sitter program design elements associated with successful patient sitter programs. These six elements are: (1) a process for requesting and discontinuing sitters, (2) patient eligibility criteria, (3) a pool of sitters, (4) criteria for sitter qualifications, (5) a sitter job description with expectations for sitter behavior and responsibilities, and (6) a training program for sitters (Feil & Wallace, 2014, p. 8-9). Respondents also revealed a higher percentage of falls without injuries reported with sitters present was (54 of 323 falls, 16.72%) opposed to falls occurring without sitters (4,523 of 53,966 falls, 8.38%). This suggests the use of sitters increases the opportunity of assisted patient falls to prevent patient injury; thus, cost savings related to decrease falls rates with harm and its severity provides a strong case justifying the costs associated with implanting and maintaining a sitter program (Feil & Wallace, 2014).

Project Design Literature Review Summary

There is limited information related to sitter training program designs and minimal studies on the elements in creating effective and successful sitter programs. There is an overwhelming amount of literature exploring sitter reduction programs and alternative interventions to replace sitter use, with the primary focus in reducing cost associated with sitter use (Coladonato, 2009; Lang, 2014). Despite the multiple sitter-use alternatives guided by sitter reduction programs, many of these sitter reduction programs also recognized the need of sitters for those patients whose safety cannot be properly managed without a sitter's close observation (Laws & Crawford, 2013; Spiva et al., 2012).

Some literature revealed the need for more effective patient assessment and algorithmic tools and guidelines assisting healthcare clinicians in determining or identifying those high-risk patients who warrant sitters (Harding, 2010; Laws & Crawford, 2013; Spiva et al., 2012). Other literature explored the design and implementation of specific unit patient environments like the Delirium Rooms (DR) (Flaherty & Little, 2011) and Specialized Adult-Focused Environment (SAFE) units (Nadler-Moodie et al., 2009). There is literature focused on the implementation of new staff positions like a patient safety assistant (PSA) whose role and function is similar to a sitter (Coladonato, 2009) or the rehabilitation patient companion (RPC) whose role and function is similar to that of a sitter with specialized training for specific patient population like traumatic brain injury patients (Bailey et al., 2009).

Review of literature like that of Lang (2014) on the impact sitters have in preventing patient falls, revealed a positive correlation between increased sitter use and

decrease in patient falls; and stressing the need of guidelines for sitter use and discontinuation, and formal education for sitters defining their role, function, and responsibilities. Recently in 2014, Richman and Sarnese's study recognized the absence of industry guidelines and standards and the importance in establishing a patient sitter skills training and competency program for sitters to effectively provide patient safety. Another recent study of best practices in the use of patient sitters to reduce falls identified six program design elements associated with successful patient sitter programs (Feil & Wallace, 2014).

Only two articles were found providing some specifications in the designing elements of a patient sitter training program. While there is more literature on sitter reduction programs and alternative sitter techniques in providing patient safety, this literature also recognized the necessity of patient sitters for those patients whose safety cannot be provide by these alternative methods. The need of sitter training and education, defining sitter role, responsibilities, and expectations, and a combination of sitters and alternative sitter methods for the most cost effective means in providing patient safety seems to be common thread among the literature.

There is a sparse research, literature, and data available concerning patient sitter training, education, and practices. While many alternative techniques are used in place of sitters like: bed and chair alarms, video monitoring, diversional and relaxation activities and techniques, family support, pain treatment, toileting schedules, bed enclosure and fall devices, physical and chemical restraints, seclusion and safe rooms, frequent observation rounds, and relocating patient closer to nurse's station, sitters are still one of the most popular and frequently intervention used in providing patient safety with close

observations (Laws & Crawford, 2013; Richman & Sarnese, 2014). This suggested that patient sitters are not going away; instead, with proper and appropriate sitter orientation, training, skill competency, and criteria for use, healthcare facilities can benefit from a combination of sitter alternative techniques and sitter use to provide patient safety care cost effectively.

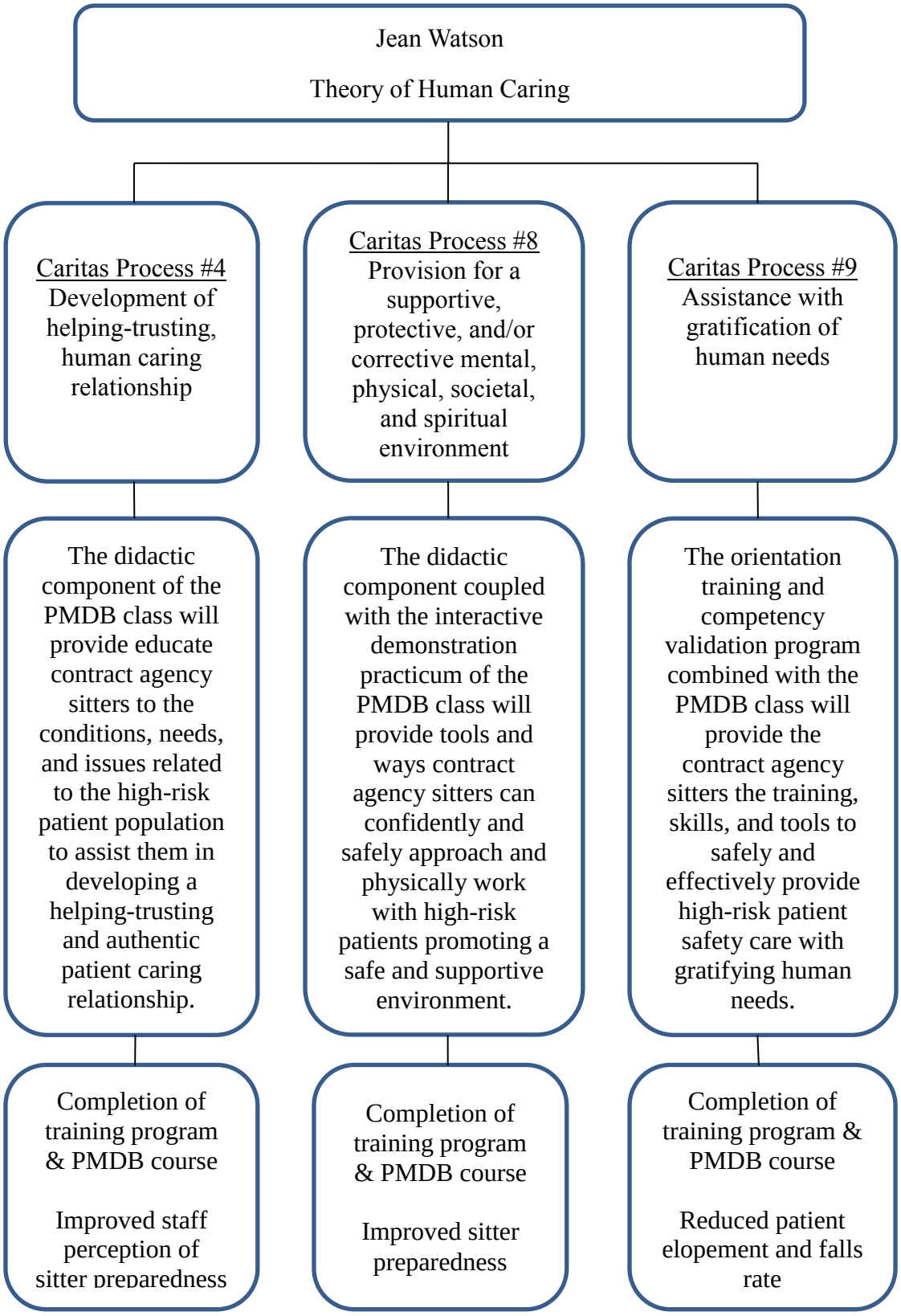
Project Purpose and Goal

The purpose of this project was to maximize the use of contract sitters through the development and implementation of a structured skills training orientation and competency assessment validation program. After the completion of the program, sitters will have the tools to effectively do their job in providing high-risk patient safety monitoring and care. The goal was to provide clear expectations, duties, functions, responsibilities, and role of sitters; averting role confusion between staff and sitters while maximizing the cost effectiveness of the facility's sitter program.

Project Objective

What is the effect of a patient safety aide (sitter) training orientation and competency validation program on patient safety, sitter preparedness, and staff nurse satisfaction? (Figure 2)

Figure 2. Conceptual-Theoretical-Empirical (CTE)



Project Design

The proposed project design to provide patient safety aide (sitter) training orientation and competency assessment validation is a two-day program. It will also be necessary to develop and standardize the common denominator of duties expected of contract sitters, regardless of which unit they are assigned high-risk patients. This will require a consensus among all 14 facility units of the duties they expect from contract sitters. This will uniform and standardize the contract sitters' role and duties alleviating unknown expectation, failed duty, and role confusion for both DVAMC staff and sitters. This will also allow DVAMC to ensure that acceptable and appropriate skills are taught for the facility and clarify preconceived skills of experienced sitters that are not acceptable or inappropriate for the DVAMC patient population and facility.

Population, Setting, Team Selection

Participants include all 32 contract agency patient safety aides (sitters) and 132 DVAMC staff at a 271-bed level 1 tertiary care referral, teaching, and research medical facility. The team selection consist of the Capstone Project Chairperson, Dr. Gayle L. Casterline; Capstone Committee member Ms. Gwen Waddell-Schultz, Associate Chief Nursing Service of Nursing Education and Medicine who oversees the management of the contract agency patient safety aides (sitters); and Capstone Committee member Dr. Susan Benware, former Associate Chief Nursing Service of Quality and Performance Improvement.

Best Practice Development and Implementation

The patient safety aide (sitter) training orientation and competency assessment validation for all contract sitters entering DVAMC is a two-day program. Day one will

focus on orientation to facility policies, patient safety aides' (sitters) policies, statement of duties, direct patient care skills, interventions, documentation, and federal government contract agency logistics (see Appendix A). Day two is specifically dedicated to the Prevention and Management of Disruptive Behaviors (PMDB) in-service class. The PMDB class is comprised of a didactic and an interactive demonstration practicum where the patient safety aides (sitters) will be trained on different patient safety interventions for high-risk patient population in the areas of combativeness, elopement, suicidal and homicidal ideations, and involuntary commitment (Appendix B).

Timeline

(Figure 3 and 4)

DATE	MILESTONE
Jan 2015	• Problem identification • Needs assessment
Feb 2015	• Problem literature review • Project goals, objectives, and mission statement
Mar 2015	• Theoretical underpinnings • Project design literature review • Project consultations and designing
May 2015	• Project consultations and development
Jul 2015	• Project proposal and work planning
Aug 2015	• Project evaluation consultation • Project evaluation development
Sep 2015	• IRB submission for project site and university approval
Oct 2015	• Project implementation (sitter surveys)
Jan 2016	• Post implementation staff evaluations
Feb 2016	• Survey data analysis and statistical processing
Mar 2016	• Patient indicators: Falls and Elopement evaluation • Patient indicators data analysis and statistical processing • Statistical evaluations and write-up

Figure 3. Timeline

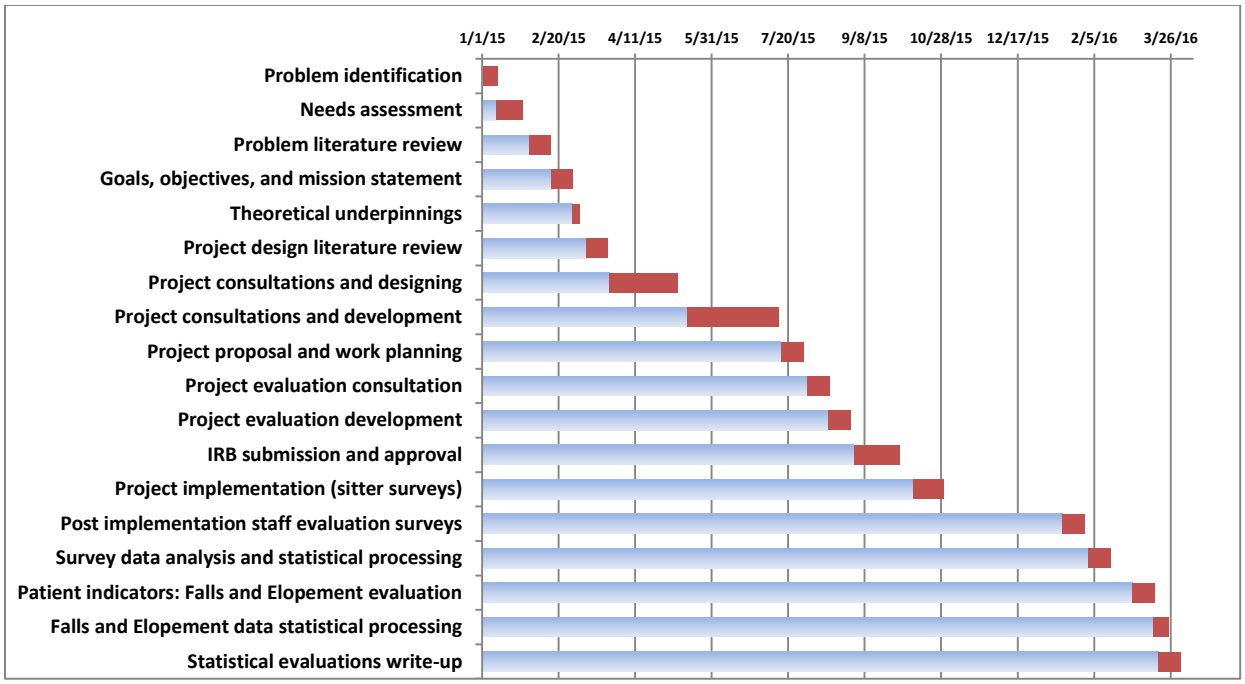


Figure 4. GANTT Chart

Outcome Measurements/Metrics

A non-randomized pre-test/post-test and retrospective pre-test/post-test comparison design will be used for the study. Three outcome measures will be collected and analyzed.

1. Patient Safety Aides (Sitters) Survey (Pre-test and Post-test). (See Appendix C.)
2. DVAMC Staff Patient Safety Aides (Sitters) Evaluation (Retrospective Pre-test and Post-test). (See Appendix D.)
3. Monthly patient elopement and falls incidents.

All current contract agency patient safety aides (sitters) will complete a descriptive pre-survey before implementation of the training orientation and competency validation program and a post-survey following the training regarding how prepared they

feel in providing direct patient safety care to high-risk patients (see Appendix C). All contract agency patient safety aide (sitter) surveys will be distributed in person and collected immediately afterwards in an envelope with no identification. This tool was developed on-site with reviews from multiple subject matter experts and stakeholders (face validity). There is no reliability data for this tool.

Durham VA Medical Center staff evaluations will be conducted on day, evening, night, weekday and weekend shifts to include randomly selected registered nurses and nursing assistants in Medical-Surgical, ICU, ED, Psych, and Community Living Center units. A random selection of 132 DVAMC staff will complete a patient safety aide (sitter) evaluation two months following the implementation of the patient safety aide (sitter) training orientation and competency validation program (see Appendix D). DVAMC staff evaluations will be distributed in person and collected immediately afterwards in an envelope with no staff identification.

Facility level outcomes will be measured by analyzing monthly patient elopement and fall incidents. This will be compared three months before and three months following the implementation of the orientation and competency validation program to determine trends in patient safety indicators.

Patient safety aide (sitter) surveys and staff evaluations, as well as patient elopement and falls incidents, will be analyzed as aggregate means, pre and post intervention, using descriptive statistics and t-tests.

Validity and Reliability of Data

All patient safety aide (sitter) survey and DVAMC staff evaluation data was meticulously reviewed, recorded, and entered onto an excel program. All data was then

reconfirmed by a professional statistician before data was analyzed with descriptive and inferential statistics using Statistical Package for the Social Sciences (SPSS) for Windows Release 18.0 version.

Eloped, missing, or unauthorized patient absences are stored in the hospital's Electronic Patient Event Report (ePER) data base, Patient Safety Management database, and the off-tour coordinator (house supervisor) daily reports. Data triangulation is used in research to validate data through cross verification from two or more sources. Patient elopement data involved data triangulation of three data areas where eloped, missing, or unauthorized patient absences are documented. After compiling all the data into one file, Patient Safety Management reviewed all reported patient elopements, missing, or unauthorized patient absences to ensure all reported data was complete. All data were then reviewed against patient's medical charts and facility's high-risk policy criteria to determine if these reported patient incidences were valid.

Patient falls data has and continues to be recorded and maintained in one excel database program by assigned facility staff. Patient falls data was reviewed and standardized so all data record categories were consistent. Monthly review of patient falls data was performed to ensure that all patient falls data are being recorded under the same format and criteria.

Cost Benefit Analysis

There is no cost involved with the implementation of the patient safety aide (sitter) training orientation and competency validation program. Since this is a redesigning and practice change onto the existing program, the cost of its design,

implementation and evaluation is absorbed as part of the capstone project in partial fulfillment of the requirements for the degree of Doctor of Nursing Practice.

The literature showed the cost of using sitters has been and continues to be a major budgetary concern for many healthcare facilities. Sitter-related costs have been reported as high as $1.3M in some healthcare facilities and are often not covered through third party payers, leaving the entire financial burden for the facility to absorb (Rochefort et al., 2011). The cost of DVAMC's outsourced sitter contract is an estimated cost of $1,100,000.00 per year. All the sitters provided by the outsourced sitter contract are certified nursing assistants. The fact that all contract sitters are certified nursing assistants further demonstrates that DVAMC is not using the sitters where they are practicing at their certified scope of practice due to the lack of a skills training orientation and competency assessment validation process. The benefit of implementing this patient safety aide (sitter) training orientation and competency assessment validation program will allow DVAMC to maximize the cost effectiveness of this outsourced sitter contract while standardizing the skills and knowledge base among the sitters to provide consistent high-risk patient safety care.

Ethical Considerations

Since this project implementation and study presented no risk to subjects and utilized anonymous survey data and unidentified patient data, expedited review was granted by the facility's and academic university's institutional review board. No data were gathered directly from patients, their family members, or friends. No consent is required from the participants, contract agency patient safety aides (sitters), or facility staff members. This training orientation and competency validation program is a

program change to the current contract agency patient safety aides (sitters) program. The completion of this program is mandatory for all contract agency patient safety aides (sitters) working at the Durham Veteran Affairs Medical Center. This is an evidence-based best-practice program change, posing no risks to the participants. There is no deception of any kind involved in this project. There are no incentives offered for this program. All contract agency patient safety aide (sitter) survey responses will be anonymous with no personal identifying demographic information. All Durham Veteran Affairs Medical Center registered nurses and nursing assistants may choose to participate or not when randomly selected to complete the patient safety aide (sitter) evaluation. All staff evaluation responses will be anonymous with no personal identifying demographic information. All responses are collected anonymously with no means of identifying who completed the survey or evaluation once submitted. No personal identifying demographic information will be requested. Data will be stored in a locked cabinet in a locked office. Computer data will be password protected. Upon completion of the project, original raw data will be forwarded to the University for locked storage for 10 years. Results will be shared with the executive leadership team of the Durham Veteran Affairs Medical Center and the contract agency. The capstone project will be downloaded to ProQuest, presented in a poster at the University School of Nursing, and possibly presented in professional conferences and publication.

Project Implementation Process

Institutional Review Board Process

The Institutional Review Board (IRB) approval was obtained from the project director's organization's IRB committee (Durham Veteran Affairs Medical Center) on

October 1, 2015. The project director's university's IRB approval was received on October 8, 2015.

Parties Impacted

When patient safety aides (sitters) lack skills training orientation and competency validation, it not only impacts their performance but also the DVAMC staff. This often requires nurses, certified nursing assistants, physicians, psychiatrists, and therapists to supplement in providing high-risk patient care. The outsourced contracting company is also impacted as they constantly have to hire and replace sitters at their own cost due to the multiple patient care infraction complaints sustained by their employees related to their knowledge deficit in providing high-risk patient safety care. In addition, the DVAMC facility is losing money as it is not optimizing the use of these sitters in a cost efficient manner. Ultimately, it is the patients who directly suffer as their care is compromised by untrained and inexperienced sitters.

Possible Difficulties in Project Implementation

One foreseeable obstacle was getting approval to provide an additional day of orientation devoted to skills training and competency assessment validation; because the facility is obligated to pay for all orientation days. Because the project was being proposed in the middle of an active contract, coordination with the contract agency to elicit all current contracted sitters to be re-oriented had to be considered.

In addition, some medical-surgical and intensive care units complained that contract sitters did not perform high-risk patient vital signs, monitor volume intake and output, and activities of daily living (ADL's); while other more experienced and confident sitters performed these tasks. Several complaints had been voiced and

documented pertaining to the performance of sitters, such as dislodging medical equipment during bathing, escalating the patient's agitation, and not bathing the patient as delegated. These aforementioned issues brought about a tension rift between the DVAMC staff and the outsourced contract sitters causing an inharmonious working environment. These issues led to repeated documented complaints of sitters by DVAMC staff and DVAMC staff by sitters. These issues contributed to concerns over difficulty in arriving with a consensus among all 14 facility units of the standardized duties expected of contract sitters.

Project Design

The implementation of the sitter skills training and competency assessment validation program project is an evidence based practice implementation with corresponding outcome metrics. It is descriptive in that there is very limited to no evidence or information exhibited in the current literature about the effects of a sitter skills training and competency assessment validation program. This project would be the first of its kind and therefore may serve to provide new information to others motivated to improve patient safety.

Survey Design

All patient safety aides (sitters) will complete a six-question survey measuring how comfortable and prepared they feel in interacting and providing direct patient care to high-risk patients, in protecting the high-risk patient, themselves, and others when the patient becomes combative, in identifying potential patient elopement, suicide, or homicide risk and its prevention, and how well they understand their role, function, and duties. The survey is designed using a 5-point Likert scale comprised of the options

strongly agree, agree, neutral, disagree, and strongly disagree. These five options are used to ascribe a quantitative value to the questions on the principle investigator designed survey.

The staff will complete a five-question patient safety aide (sitter) evaluation measuring how well the patient safety aides (sitters) are performing specific tasks. These include asking for patient report before their assignment, providing direct personal patient care and observation documentation, using appropriate patient observation techniques, and reporting patient condition changes. The survey is designed using a 5-point Likert scale comprised of the options strongly agree, agree, neutral, disagree, and strongly disagree. These five options are used to ascribe a quantitative value to the questions on the principle investigator designed survey.

Process of Project

The patient safety aide (sitter) training orientation and competency validation program is a two-day program. Day one is focused on facility policies, patient safety aides' (sitters) policies and statement of duties, direct patient care skills, interventions, documentation, and federal government contract agency logistics. Day two is dedicated to the Prevention and Management of Disruptive Behaviors (PMDB) didactic and interactive demonstration practicum class.

The implementation of the patient safety aide (sitter) training orientation and competency validation program was scheduled to be implemented and completed in October 2015. There were a total of 32 contract employees orientated in the program. Due to limited seats available for the second part, day two, the PMDB class, the

completion of the patient safety aide (sitter) training orientation and competency validation program was not completed until late November 2015.

Outcome/Metrics Data

All contract agency patient safety aides (sitters) were given a descriptive pre-survey to complete before participating in the training orientation and competency validation program. After completing the entire program, they were given a descriptive post-survey to complete related to how prepared they feel in providing direct patient safety care to high-risk patients. All surveys were distributed in person, self-administered, and immediately collected and place in an envelope with no personal identification.

A retrospective pre and post-test design was used to conduct evaluations with the Durham VAMC staff. The staff questionnaires were administered to registered nurses and nursing assistants in the Medical-Surgical, ICU, ED, Psych, and Community Living Center units. These staff participants were randomly selected from day, evening, night, weekday, and weekend shifts. Evaluation questionnaires were distributed in person, self-administered, and immediately collected and placed in an envelope with no personal identification. Five evaluations were collected on each shift (three 8-hour shifts) on four different Medical-Surgical units for a total of 60 evaluations. Three evaluations were collected on each shift (two 12-hour shifts) on three different ICUs for a total of 18 evaluations. Three evaluations were collected on each shift (three 8-hour shifts) from the ED for a total of nine evaluations. Three evaluations were collected on each shift (three 8-hour shifts) from the Psych unit for a total of nine evaluations. Four evaluations were collected on each shift (three 8-hour shifts) on three different Community Living Center

units for a total of 36 evaluations; for a total of 132 DVAMC staff evaluations. Durham VAMC patient elopement and falls data were compared for three months before and three months after the program implementation.

Project Evaluation

Statistical Package for the Social Sciences (SPSS) version 18 was used for all statistical analyses. Statistical significance was established apriori at the 0.05 significance level.

Interpretation of Outcomes/Metrics

The interpretation of outcomes and metrics will be based on the statistical findings of the patient safety aide (sitter) survey, staff evaluation of the patient safety aide (sitter), patient falls data, and patient elopement data collected.

Patient Safety Aide (Sitter) Survey

A paired sample t-test was used to test the extent to which patient safety aides (sitters) feel prepared to provide direct patient safety care to high risk patients will improve significantly after they receive training related to providing direct patient safety care to high-risk patients. As shown in Table 1 and Figure 5, results of the paired sample t-test show that on all six evaluation indicators, the patient safety aides' sense of preparedness after the intervention (i.e., M = 4.44 to 4.63, SD = 0.57 to 0.67) is statistically significantly higher compared to their average scores before the intervention (i.e., M = 1.59 to 2.03, SD = 0.62 to 1.09): $t_{rel}(31) = 11.83$ to 15.78, $p < .001$ (two-tailed)). Thus, the paired sample t-test provides evidence that patient safety aides experience a higher sense of preparedness after receiving the training orientation and competency validation program. As illustrated in Figure 5, only one of the average

preparedness scores for the six indicators was above 2 before the training; majority of the average scores were below 2. However, after the intervention all average preparedness scores were above 4.

To understand patient safety aides' (sitters') overall self-assessment of preparedness, the summation method was used to create overall preparedness indexes for the pretest and post-test indicators. A paired sample t-test was conducted to assess whether the differences in the self-reported level of preparedness before and after the intervention differed significantly. The test results show that the overall level of preparedness before the intervention (M = 10.31, SD = 3.95), was significantly lower compared to the level of preparedness after the training intervention (M = 27.03, SD = 3.14): $t_{rel}(31) = 15.86$, $p < .001$ (two-tailed). The mean difference (i.e., 16.72) indicates that the patient safety aides self-report that on average, they are one and half times more prepared now than before the intervention. Results of the overall preparedness scores are in line with results from the individual indicators.

Table 1

Results of paired sample t-test indicating significant improvement in patient safety aides' (sitters') sense of preparedness after receiving training

Evaluation indicators	Pre-test *M*(*SD*)	Post-test *M*(*SD*)	Mean difference	*t-value*
Overall patient safety aides' self-evaluation score.	10.31(3.95)	27.03(3.14)	16.72	15.86***
I am comfortable in interacting with high-risk patients.	1.59(0.62)	4.44(0.67)	2.84	15.78***
I feel prepared to provide direct patient care to high-risk patients.	1.63(0.71)	4.44(0.62)	2.81	14.59***
I know how to protect the patient, myself, and others when a patient becomes combative, aggressive, or agitated.	1.66(0.70)	4.50(0.57)	2.84	14.88***
I know how to identify a potential elopement risk, SI, or HI patient.	1.69(0.82)	4.53(0.57)	2.84	15.78***
I know how to safely prevent a patient from eloping.	1.72(0.92)	4.50(0.67)	2.78	11.98***
I understand my role, function, and duties as a Patient Safety Aide.	2.03(1.09)	4.63(0.66)	2.59	11.83***

*$p < .05$, **$p < .01$, ***$p < .001$

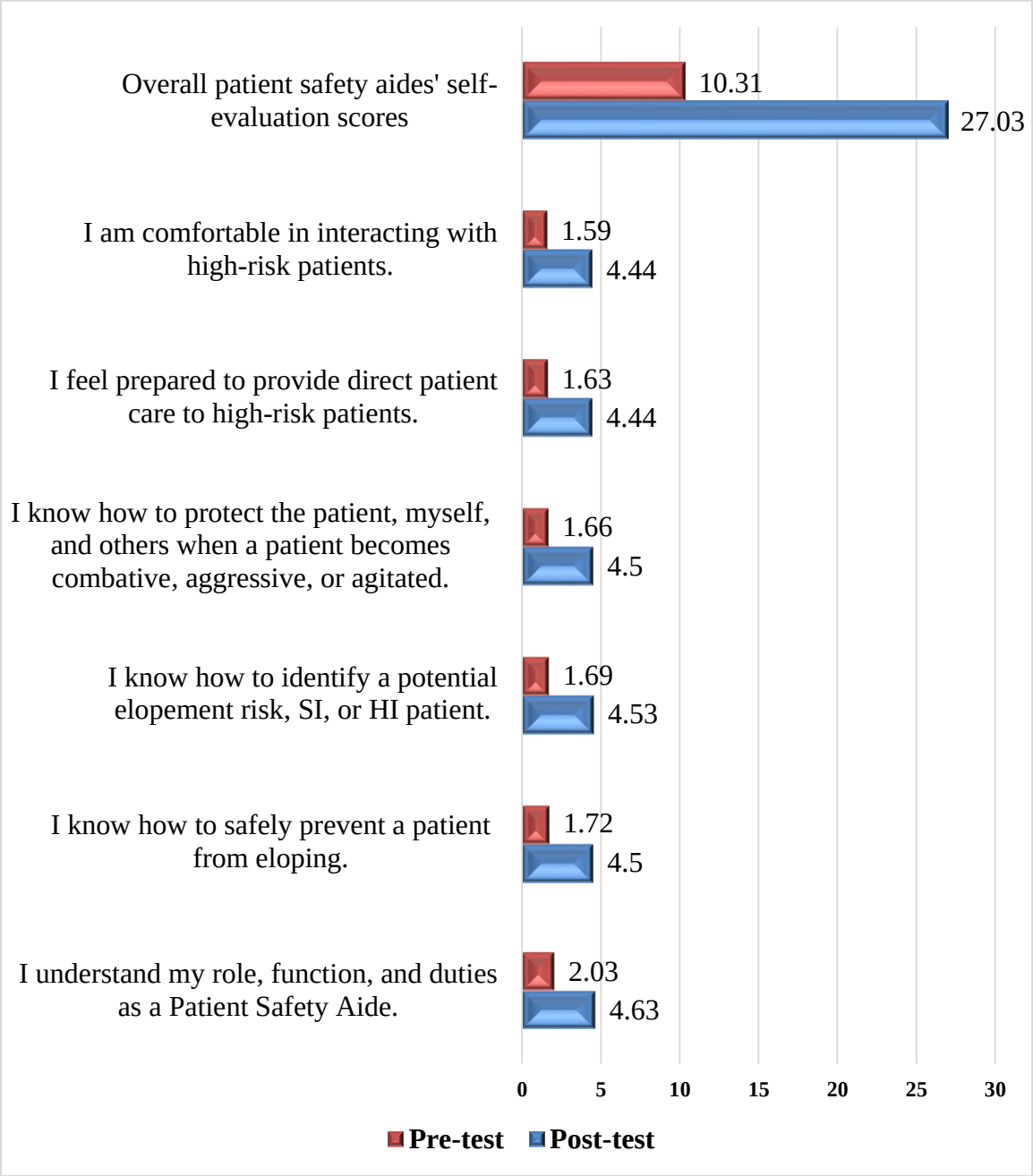


Figure 5. Results of patient safety aides' (sitters') sense of preparedness before and after receiving training

Comparison of the pre and post-test scores in Figure 6 shows that not only did the intervention lead to improved sense of preparedness, but it also ensured a more uniformed sense of preparedness; this is evident by the fact that at pre-test (i.e., figure 6a) there is wide variability in responses (i.e., longer vertical bars in figure 6a) but the variability narrowed after the intervention, as depicted by the shorter vertical bars in figure 6b. In other words, before the intervention, some respondents rated their level of prepared as 1 (i.e., completely unprepared) but after the intervention, the worse prepared patient safety aide (sitter) scored at least 2.8 (i.e., somewhat prepared), with the exception of item 6 (i.e., whether patient safety aides (sitters) understand their role, function, and duties).

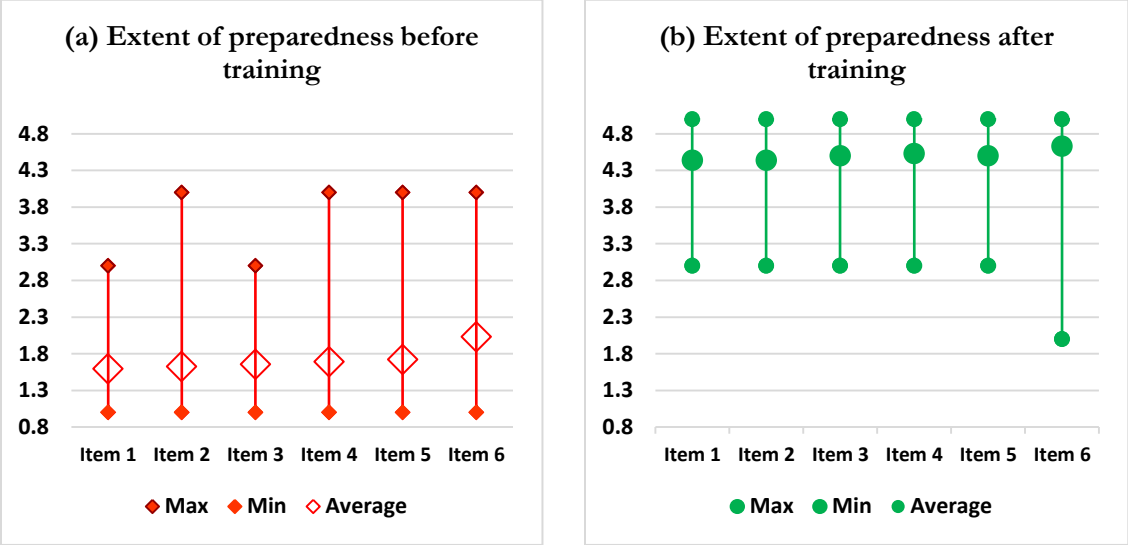


Figure 6. Comparison of patient safety aides' (sitters') self-perceived level of preparedness before and after receiving training

Staff Evaluation of Patient Safety Aides (Sitters)

A paired sample t-test was used to test whether staff perception of patient safety aides' (sitters') preparedness improved following patient safety aide (sitter) orientation training. Results of all staff evaluation indicators presented in Table 2 and Figure 7 show that staff perception of patient safety aides' (sitters') preparedness after the training intervention (i.e., M = 3.97 to 4.14, SD = 0.72 to 0.86) was statistically significantly higher compared to evaluation scores before the intervention (i.e., M = 2.36 to 2.59, SD = 0.99 to 1.19): $t_{rel}(131) = 12.49$ to 13.96, $p < .001$ (two-tailed). Thus, there is evidence to support that staff perceive patient safety aides (sitters) as having a higher sense of preparedness following orientation training and competency validation.

Table 2

Results of paired sample t-test indicating significant improvement in staffs' rating of patient safety aides' (sitters') sense of preparedness after receiving training

Evaluation indicators	Pre-test *M*(*SD*)	Post-test *M*(*SD*)	Mean difference	*t-value*
Overall score for staff evaluation of patient safety aides	12.55(4.57)	20.19(3.08)	7.64	14.94***
Patient safety aides are asking for patient report for their patient assignment.	2.50(1.08)	4.06(0.74)	1.52	13.92***
Patient safety aides are providing direct personal patient care.	2.49(1.08)	3.97(0.84)	1.48	12.96***
Patient safety aides understand the different types of observations.	2.36(0.99)	3.92(0.86)	1.56	13.69***
Patient safety aides are reporting patient condition changes to the patient's nurse or Unit Charge RN.	2.59(1.09)	4.09(0.77)	1.49	12.49***
Patient safety aides are providing observation documentation on their assigned patient(s)	2.56(1.19)	4.14(0.72)	1.58	12.96***

*$p < .05$, **$p < .01$, ***$p < .001$

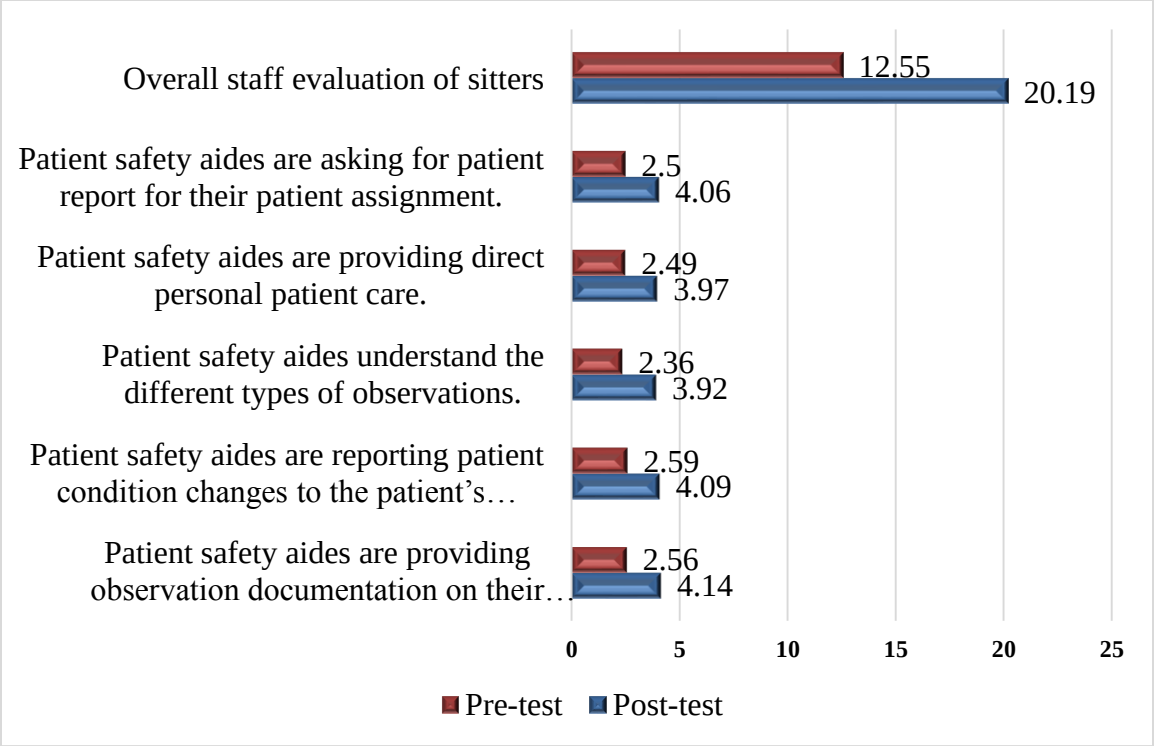


Figure 7. Staff evaluation of patient safety aides' (sitters) preparedness before and after the training intervention

To assess staffs' overall impression of patient safety aides' (sitters') level of preparedness, the summation method was used to create two overall preparedness indexes; one for the pretest and the other for post-test indicators. A paired sample t-test was conducted to assess whether the differences in staffs' evaluation of patient safety aides' (sitters') preparedness before and after the intervention differed significantly. As illustrated in Figure 8a and 8b, the test results show that staff overall perception of level of patient safety aide (sitter) preparedness before the intervention (M = 12.55, SD = 4.57), was significantly lower compared to their evaluation after the training intervention (M = 20.19, SD = 3.08): $t_{rel}(131) = 14.94$, $p < .001$ (two-tailed). The mean difference of 7.64 indicates that on average, staff perception of patient safety aides' (sitters') level of

preparedness improved by nearly 38%. Thus, results of the overall perception of patient safety aide (sitter) preparedness are in line with results of the individual indicators.

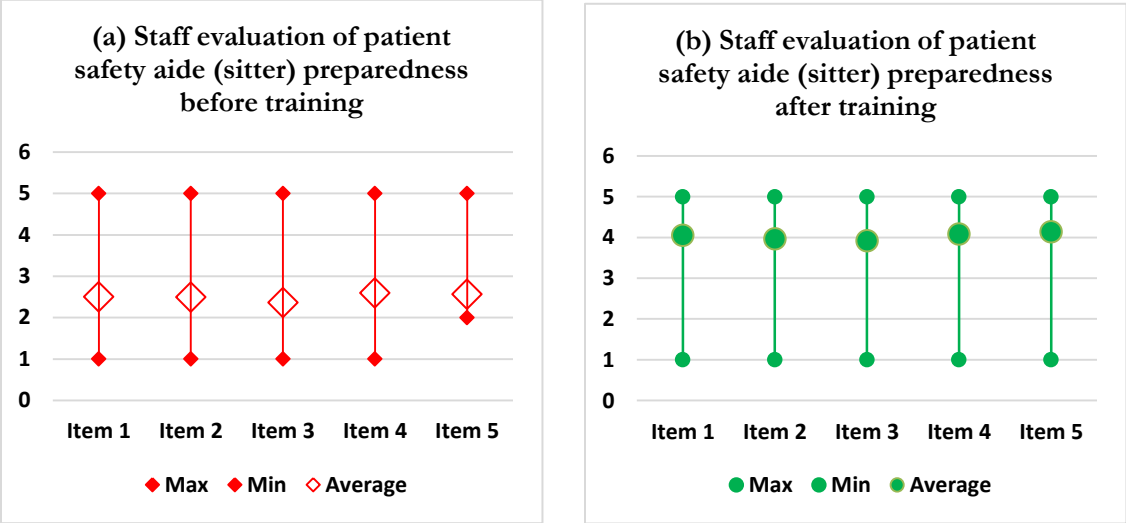


Figure 8. Comparison of staffs' perception of patient safety aides' (sitters') level of preparedness before and after receiving training

Patient Falls

Figure 9 shows the overall number patient falls, regardless of nursing unit. Despite the fluctuation in the number of falls, the overall trend line shows a marginal but steady decline in the number of falls. The mean number of falls before the start of the intervention in October 2015 dropped from 30.75 (SD = 5.25) to 25.6 patient falls (SD = 5.46) for a decrease mean difference of 5.15 after implementation of the intervention.

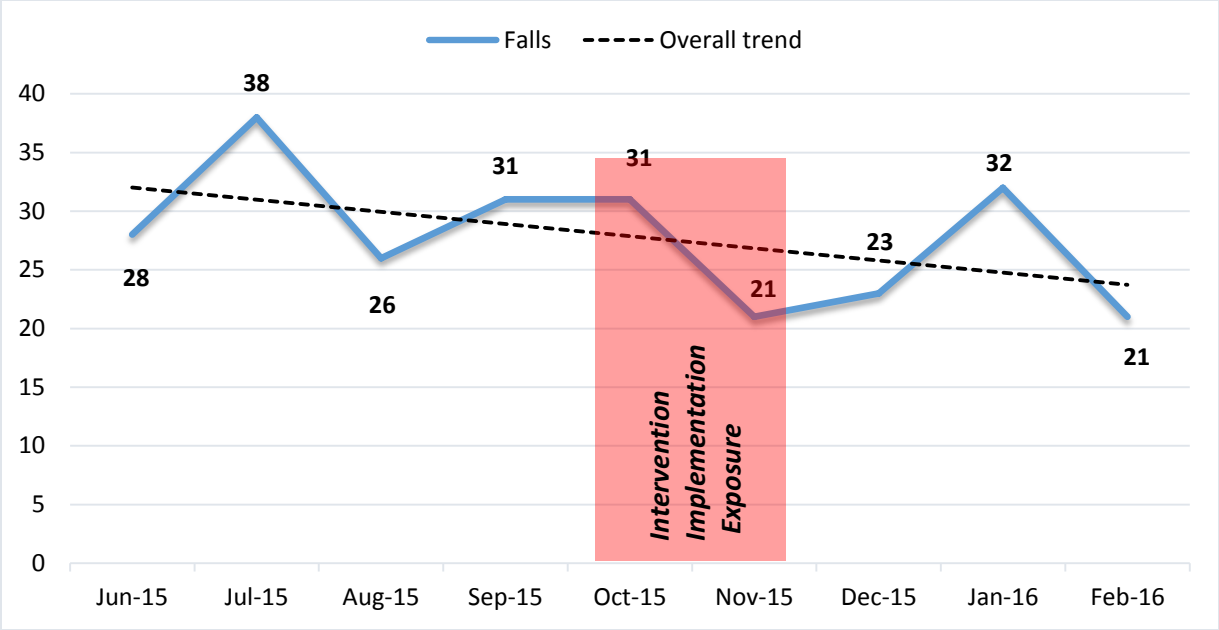
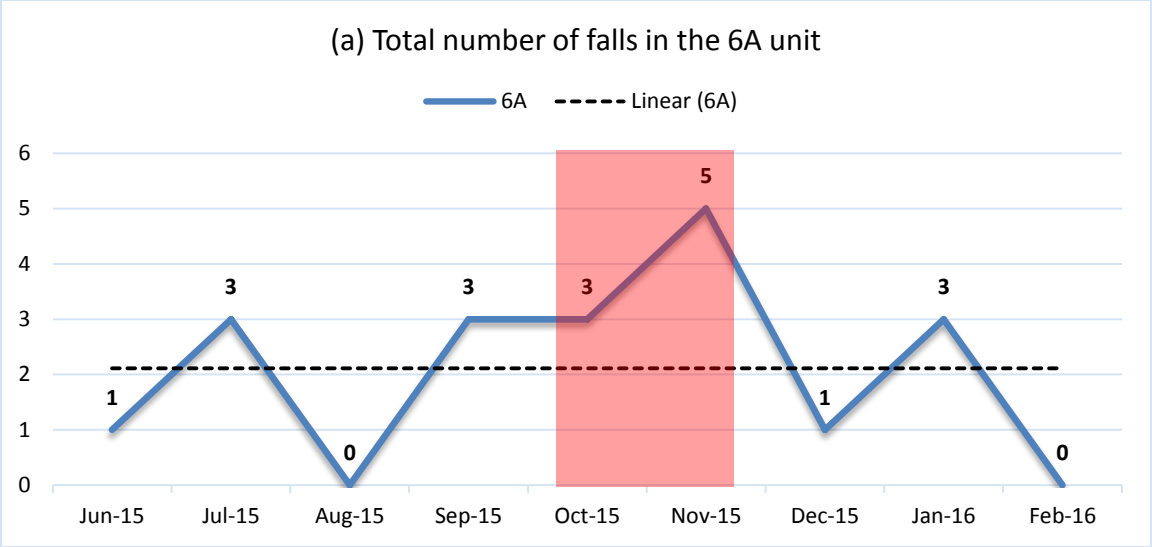


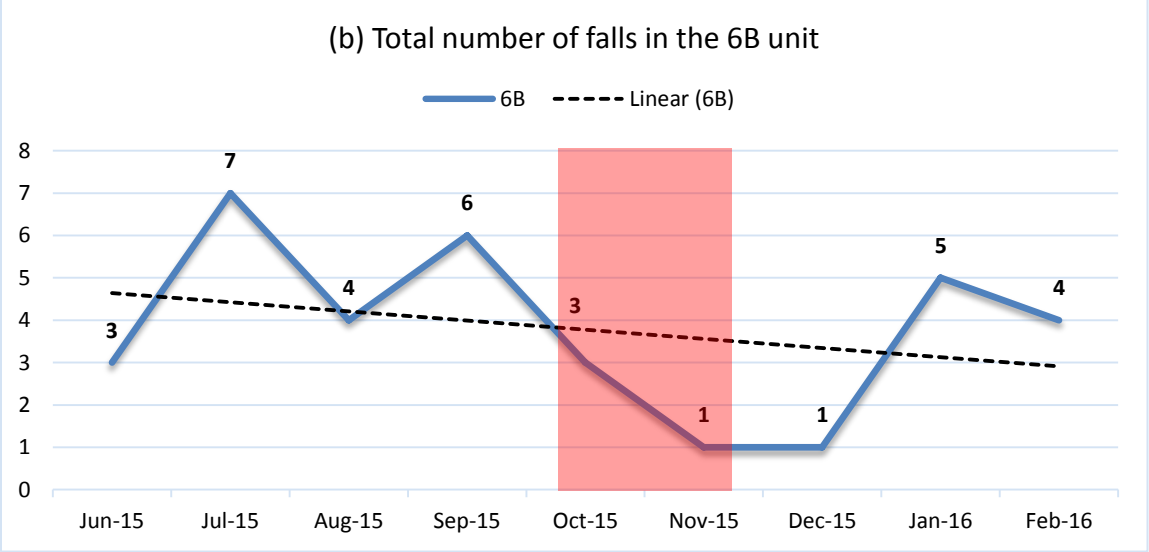
Figure 9. Total number of falls across all units.

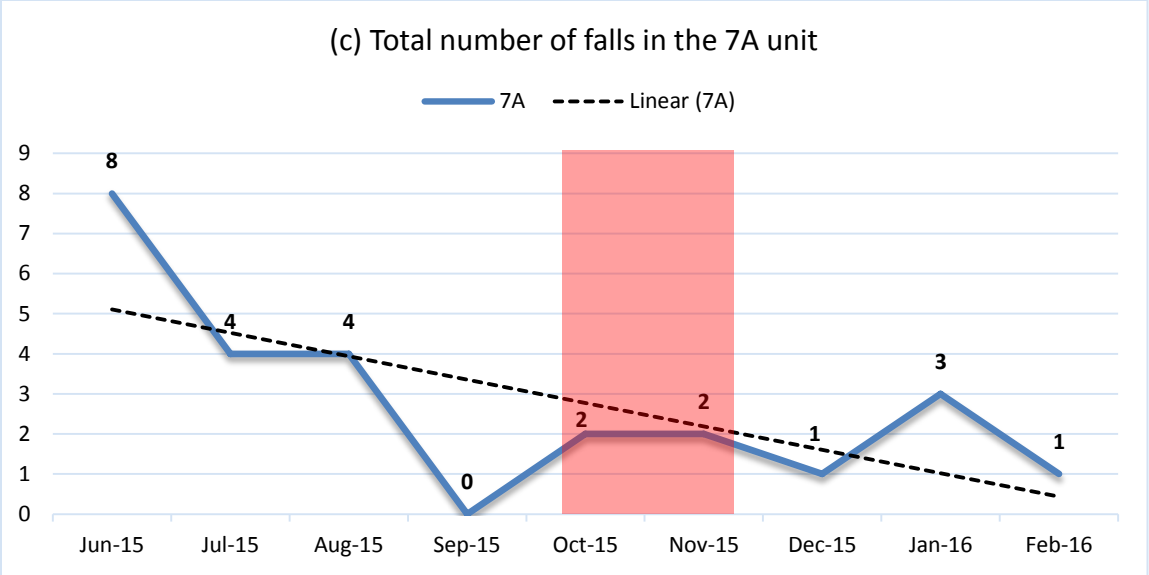
Figure 10 identifies the overall trends by individual units. The table presents a broad overview of the number of falls from June 2015 through February 2016 for each unit included in the study. In the table, shades of blue are used to depict trends in the number of falls, where darker shades represent a high number of falls, and lighter shades indicate a fewer number of patient falls. The red line denotes the period before and after the intervention implementation, and identifying Oct-15 and Nov-15 the period of the intervention implementation. Overall, there appear to be more dark shades before the intervention implementation (i.e., before the first red line) compared to after the intervention (i.e., after the second red line). The CLC2 unit is the only unit that continued to have more dark shades (i.e., 7 to 8 falls) after the intervention. Even in this case, the trajectory of falls in the CLC2 unit shows a downward trend in the number of patient falls. It is worth noting that there was visible variance in the number of falls across different units as shown in panels a, b, c, through m of Figure 11.

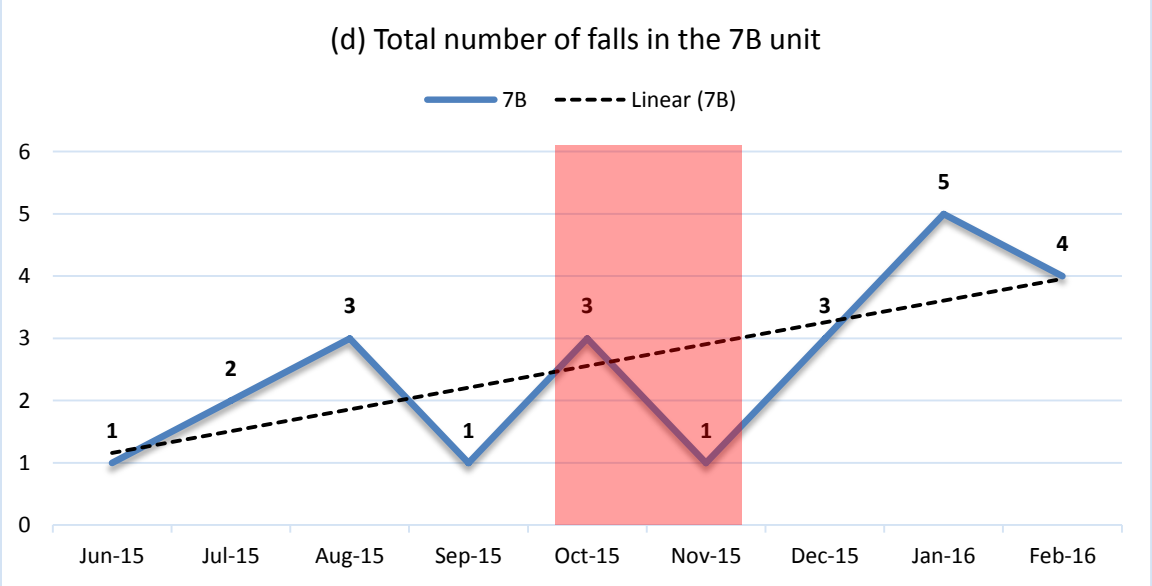
Unit	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16
6A	1	3	0	3	3	5	1	3	0
6B	3	7	4	6	3	1	1	5	4
7A	8	4	4	0	2	2	1	3	1
7B	1	2	3	1	3	1	3	5	4
CICU	0	0	0	0	0	0	0	1	0
MICU	0	0	1	0	0	1	0	0	0
SICU	0	1	0	0	0	0	0	0	1
CLC1	4	4	2	3	2	2	5	3	2
CLC2	4	5	2	7	10	3	8	7	4
Hospice	0	1	0	3	2	0	2	0	1
PARC	3	7	3	8	4	6	2	3	1
ED	3	2	4	0	0	0	0	2	1
OTHER	1	2	3	0	2	0	0	0	2

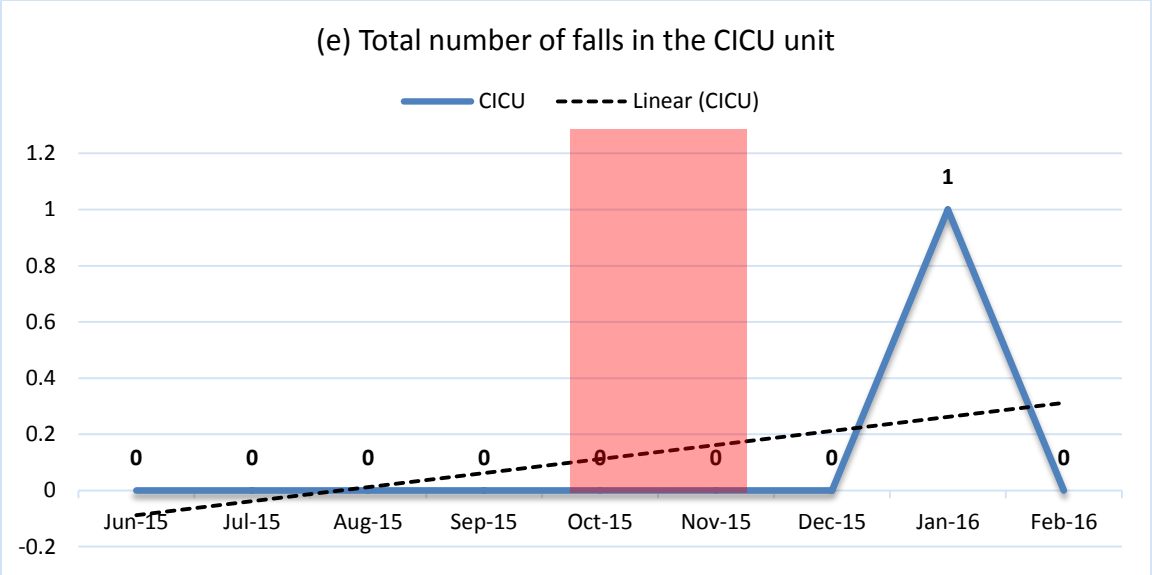
Figure 10. Number and patterns of falls per unit before and after intervention

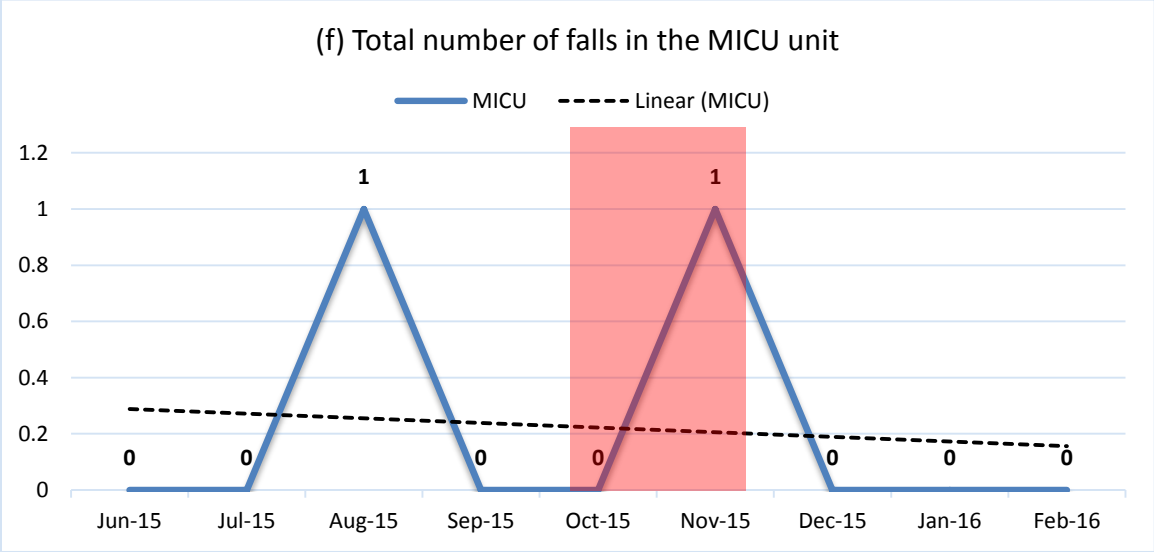

(a) Total number of falls in the 6A unit
6A
Linear (6A)
6
5
4
3
2
1
0
1
3
0
3
3
5
1
3
0
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16

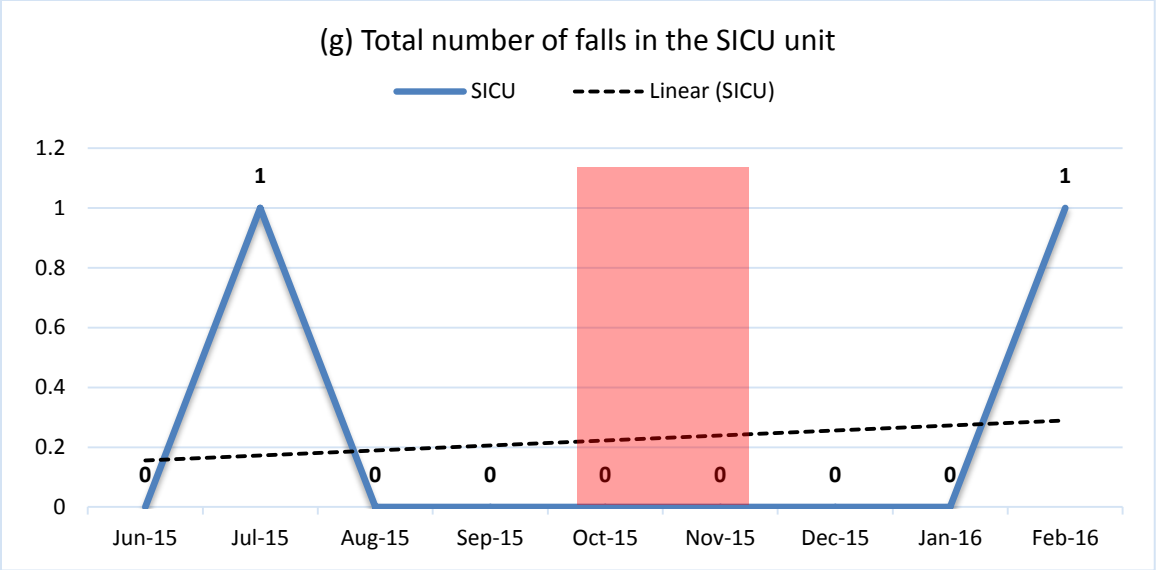

(b) Total number of falls in the 6B unit
6B
Linear (6B)
8
7
6
5
4
3
2
1
0
3
7
4
6
3
1
1
5
4
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16

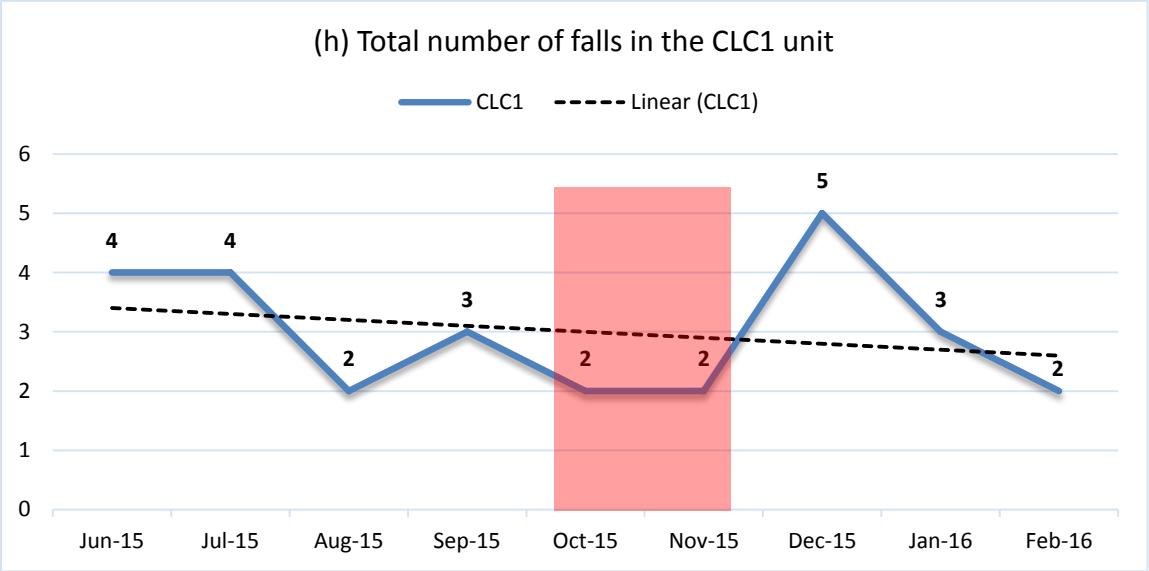

(c) Total number of falls in the 7A unit
7A
Linear (7A)
9
8
7
6
5
4
3
2
1
0
8
4
4
0
2
2
1
3
1
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16

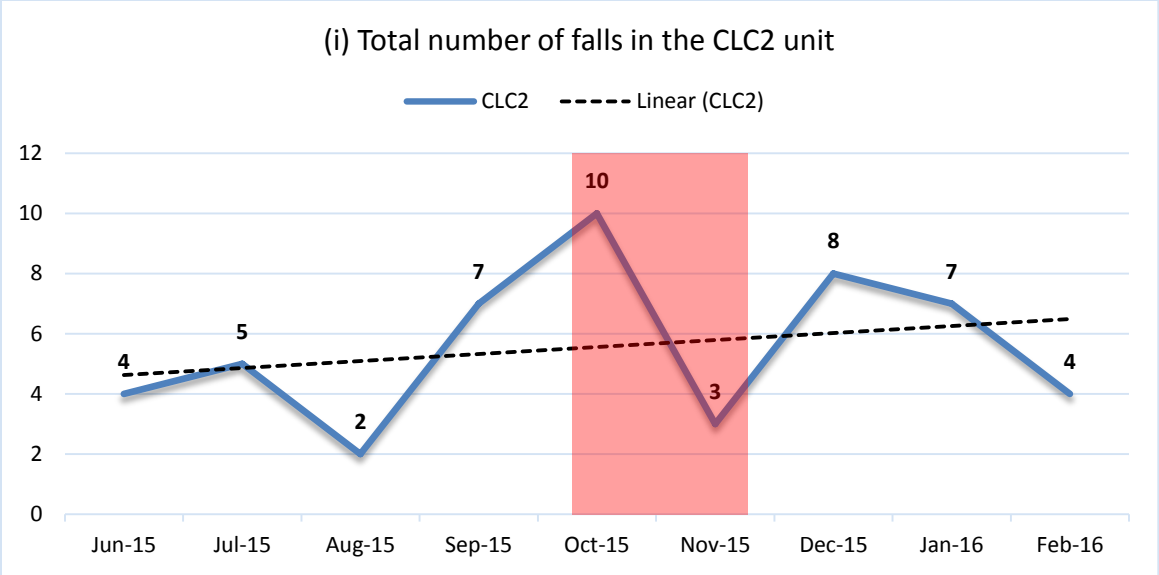

(d) Total number of falls in the 7B unit
7B
Linear (7B)
6
5
4
3
2
1
0
1
2
3
1
3
1
3
5
4
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16

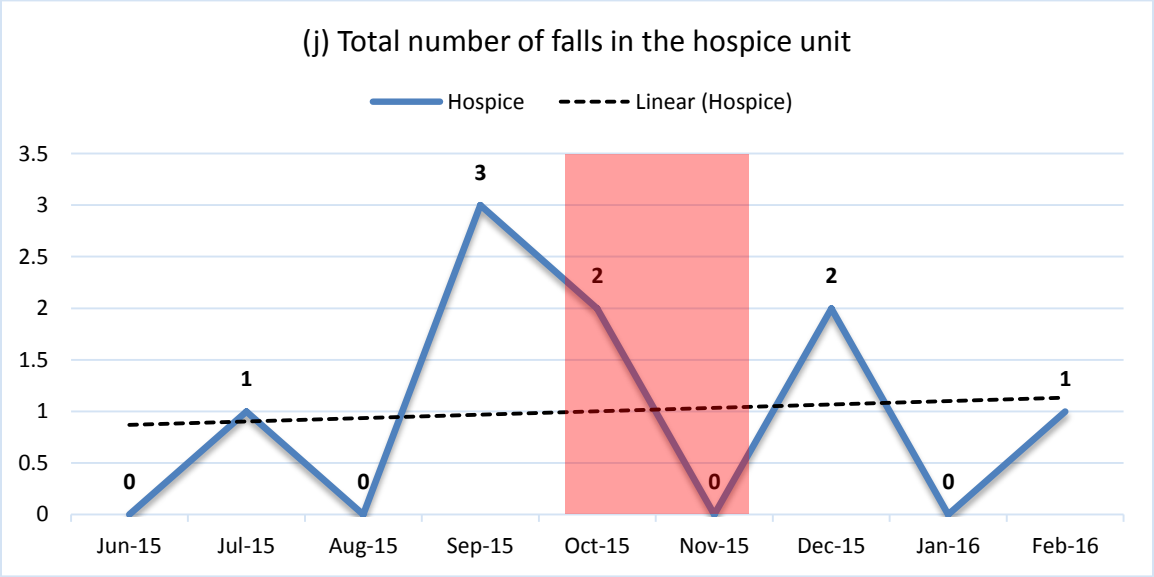

(e) Total number of falls in the CICU unit
CICU
Linear (CICU)
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
0
0
0
0
0
0
0
1
0
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16

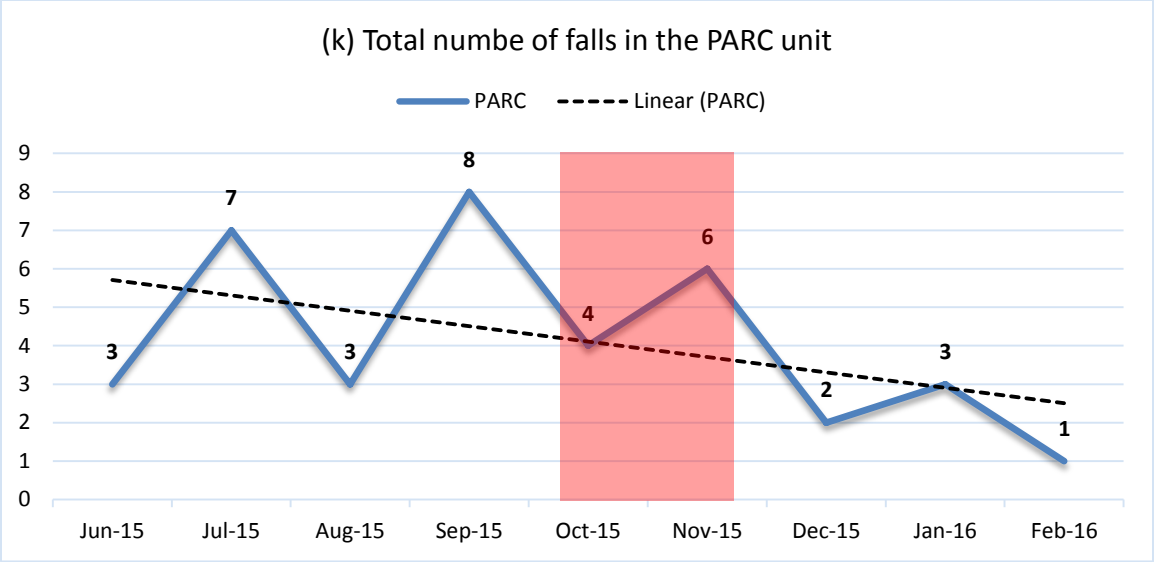

(f) Total number of falls in the MICU unit
MICU
Linear (MICU)
1.2
1
0.8
0.6
0.4
0.2
0
0
0
1
0
0
1
0
0
0
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16

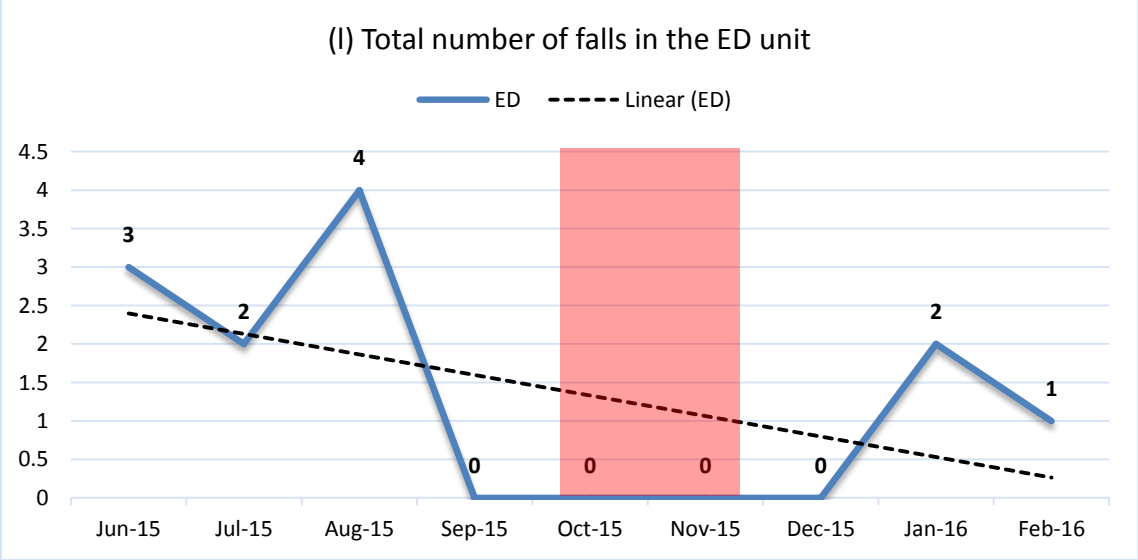

(g) Total number of falls in the SICU unit
SICU
Linear (SICU)
1.2
1
0.8
0.6
0.4
0.2
0
1
1
0
0
0
0
0
0
0
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16


(h) Total number of falls in the CLC1 unit
CLC1
Linear (CLC1)
6
5
4
3
2
1
0
4
4
2
3
2
2
5
3
2
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16


(i) Total number of falls in the CLC2 unit
CLC2
Linear (CLC2)
12
10
8
6
4
2
0
4
5
2
7
10
3
8
7
4
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16


(j) Total number of falls in the hospice unit
Hospice
Linear (Hospice)
3.5
3
2.5
2
1.5
1
0.5
0
0
1
0
3
2
0
2
0
1
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16


(k) Total numbe of falls in the PARC unit
PARC
Linear (PARC)
9
8
7
6
5
4
3
2
1
0
3
7
3
8
4
6
2
3
1
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16


(l) Total number of falls in the ED unit
ED
Linear (ED)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
3
2
4
0
0
0
0
2
1
Jun-15
Jul-15
Aug-15
Sep-15
Oct-15
Nov-15
Dec-15
Jan-16
Feb-16

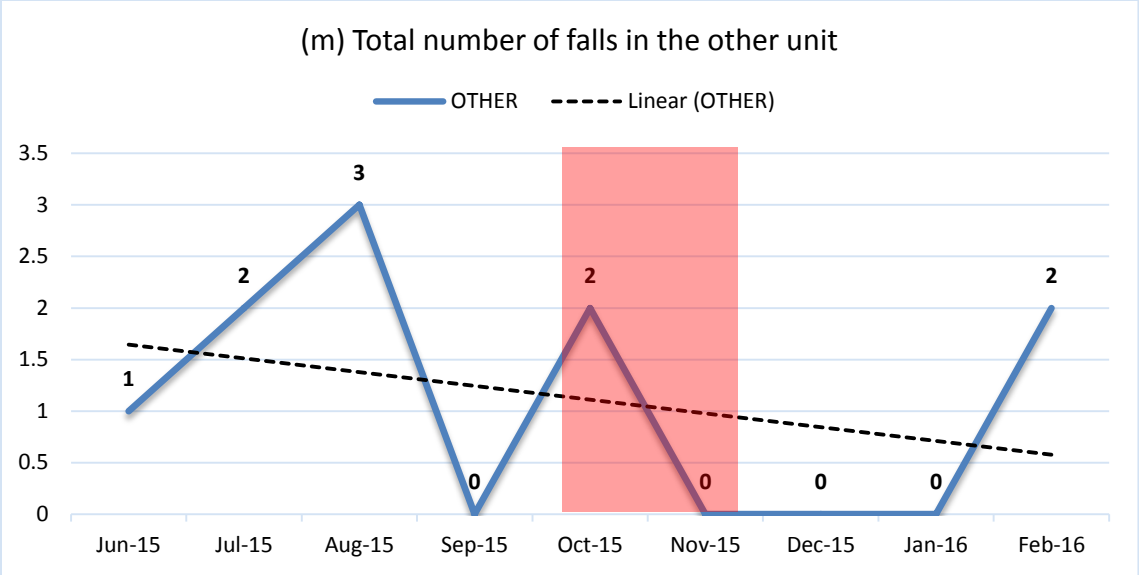


Figure 11 (a – m). Illustration of variability in the number and trends of patient falls across units.

Presence of Patient Safety Aides (Sitters)

Before implmentation of the patient safety aides (sitters) training program intervention, there were a total of 13 instances where patient safety aides (sitters) were present during patient falls. After the intervention, there were a total of six incidences where patient safety aides (sitters) were present during patient falls. As illustrated in Figure 12, there was a 54% drop in patient fall incidents with patient safety aides (sitters) present after the training program intervention.

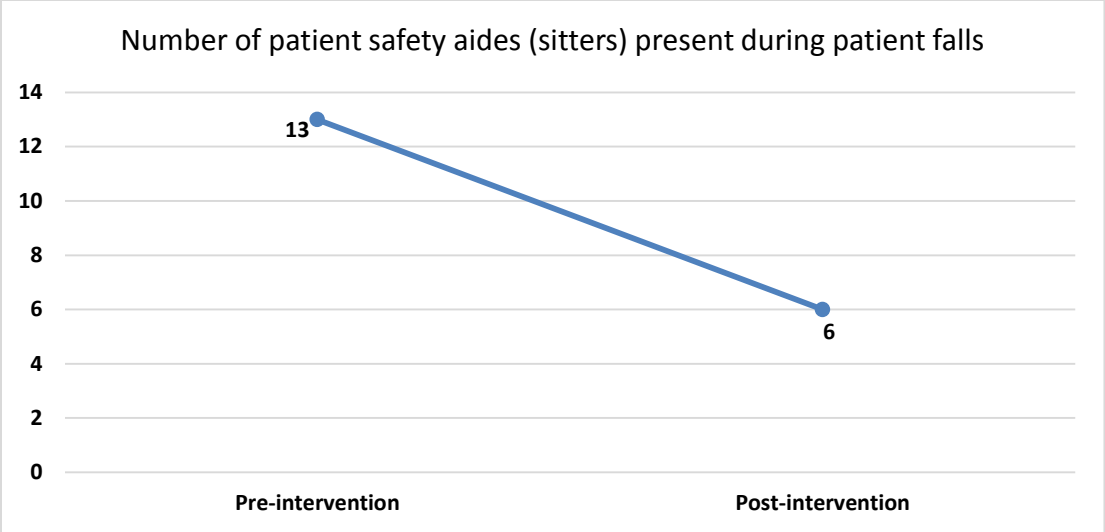


Figure 12. Number of patient safety aides (sitters) present during patient falls.

Figure 13 shows that the incidence of patient falls during the presence of patient safety aides (sitters) reduced from of 3.25 falls per month before the intervention to two falls per month after the intervention. In other words, there was a 38% drop in monthly instances where patients fell when patient safety aides (sitters) were present.

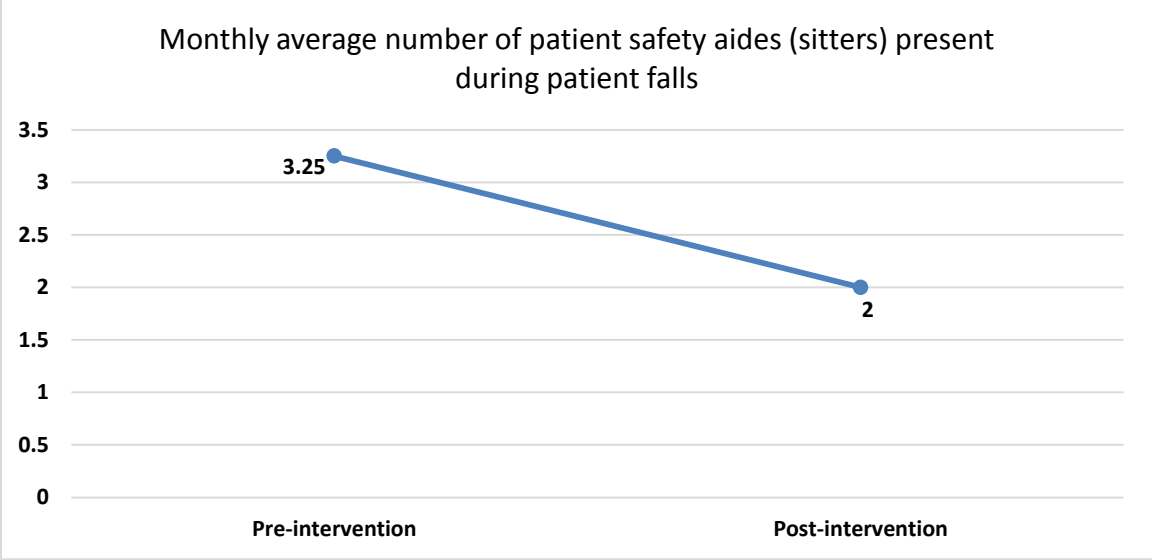


Figure 13. Monthly average number of patient safety aides (sitters) present during patient falls.

Figure 14 breaks down the number of patient falls by unit. Seven units experienced incidences of patient falls in the presence patient safety aides (sitters) during the pre-intervention period. The number of incidences involving patient falls with patient safety aides (sitters) present dropped after the intervention, with the exception of the Hospice unit. In the Hospice unit the number of patient falls remained unchanged.

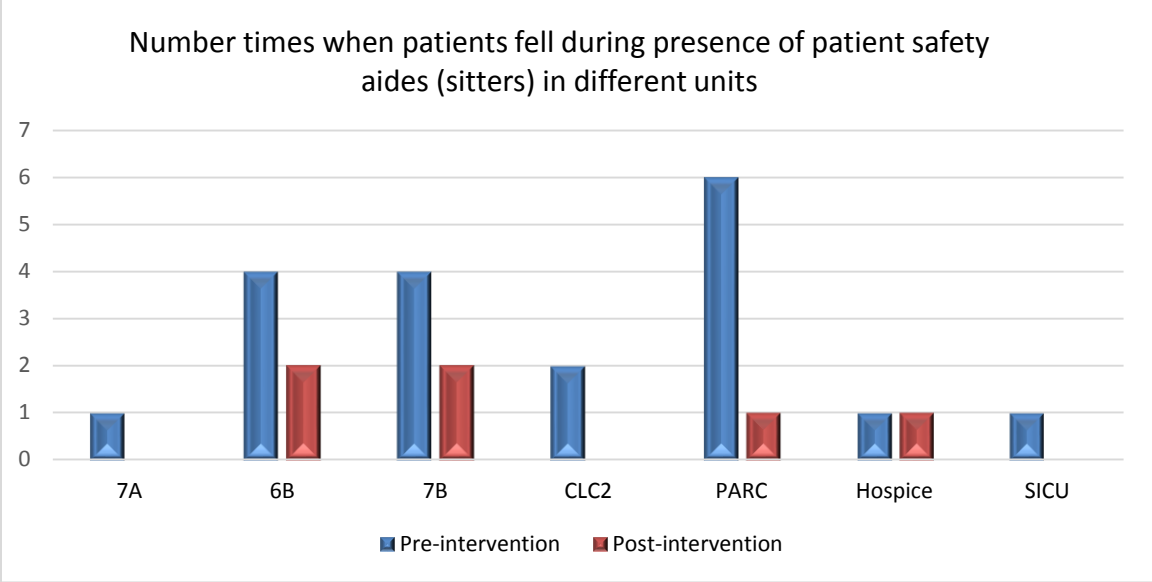


Figure 14. Number times when patients fell during presence of patient safety aides (sitters) in different units.

Patient Elopements

The patient elopement data collected was limited with minimal variations to perform any detailed and useful inferential statistical analysis. There were a total of 30 patient elopement events in a 12-month period from March 2015 through February 2016. Patients are considered missing if they are "at risk" and have disappeared from patient care areas. Patients are considered "at risk" if they are at risk for harm to themselves or others if not found and returned to a safe treatment environment. Patients are considered absent if they leave the treatment area without knowledge or permission but do not meet the "at risk" criteria. Patients meeting absent criteria were excluded from the final, in-

depth review. There were eight such patients. Of the 30 patient events, 19 were considered at risk: four patients had patient safety aides (sitters) at time of elopement, one patient had a wander guard, and two patients were involuntarily committed. The following charts (Figures 15 – 18) represent the high-risk patients that were reviewed in more depth in the aggregate. The patients who left against medical advice (AMA) or failed to sign-out but had full capacity were not included.

Figure 15 illustrates the overall trend line shows a marginal but steady decline in the number of patient elopements. Figure 16 identifies six patient elopement risk categories and shows the greatest number of patient elopements in the dementia/cognitive impairment risk category. As shown in Figure 17, the unit with the highest number of elopements is 6B, followed by 7B, ED, CLC1, and Hospice, in that order. Figure 18 illustrates age group 70 experienced more elopements than any other age group; and age group 80 with the fewest patient elopements. Figure 19 shows Friday and Tuesday are the days with the least number of elopements; and Sunday having the greatest number of patient elopements.

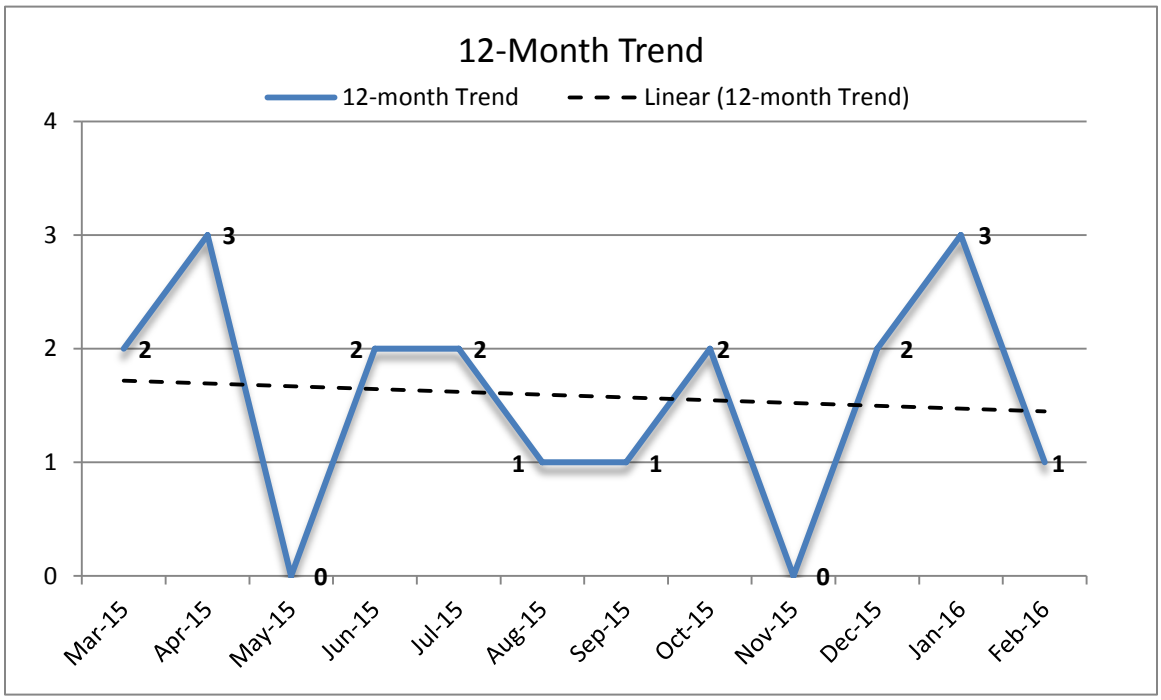


Figure 15. 12-Month Trend

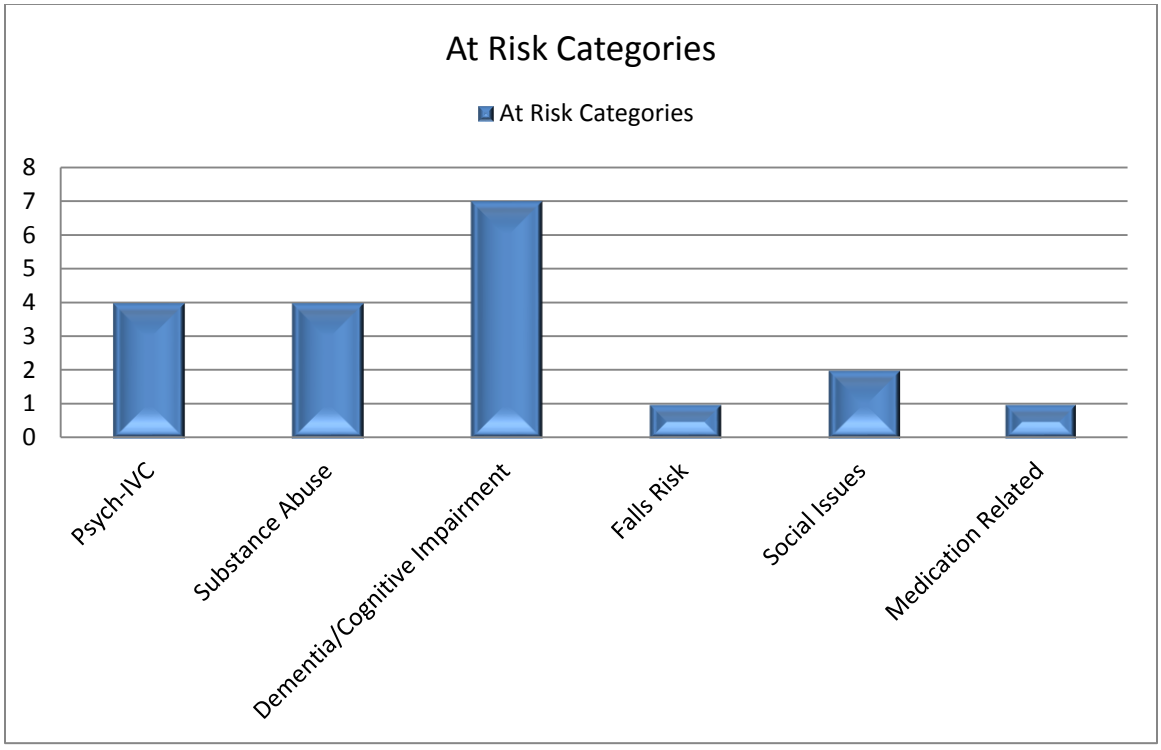


Figure 16. At Risk Categories

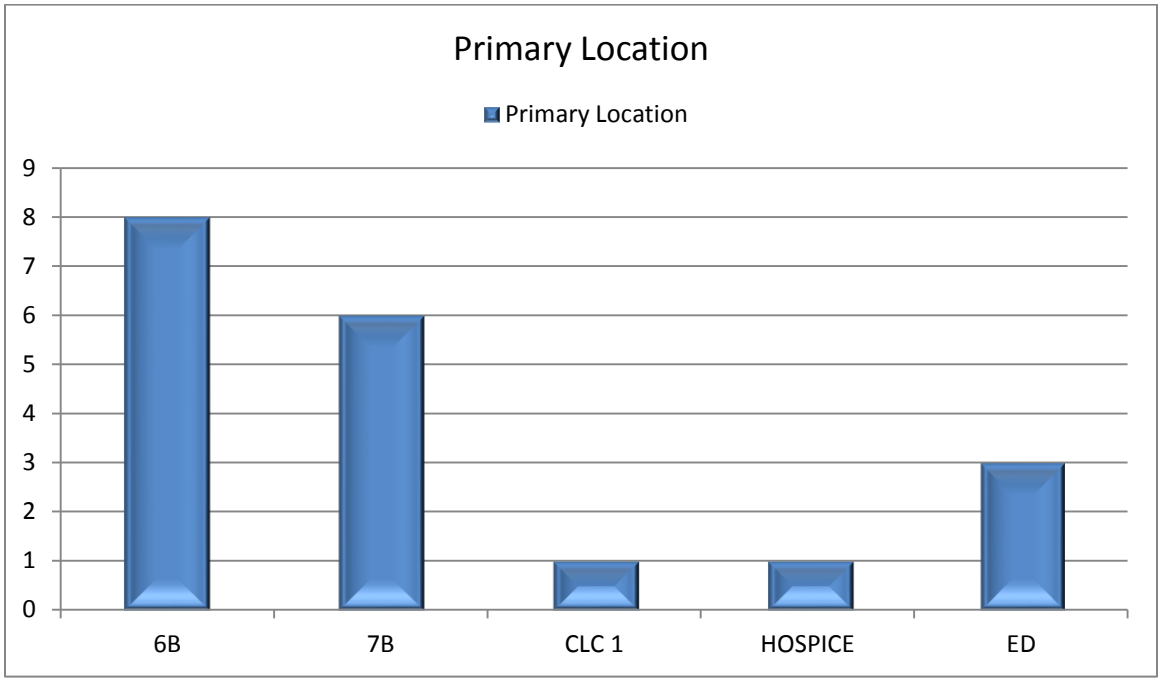


Figure 17. Primary Location

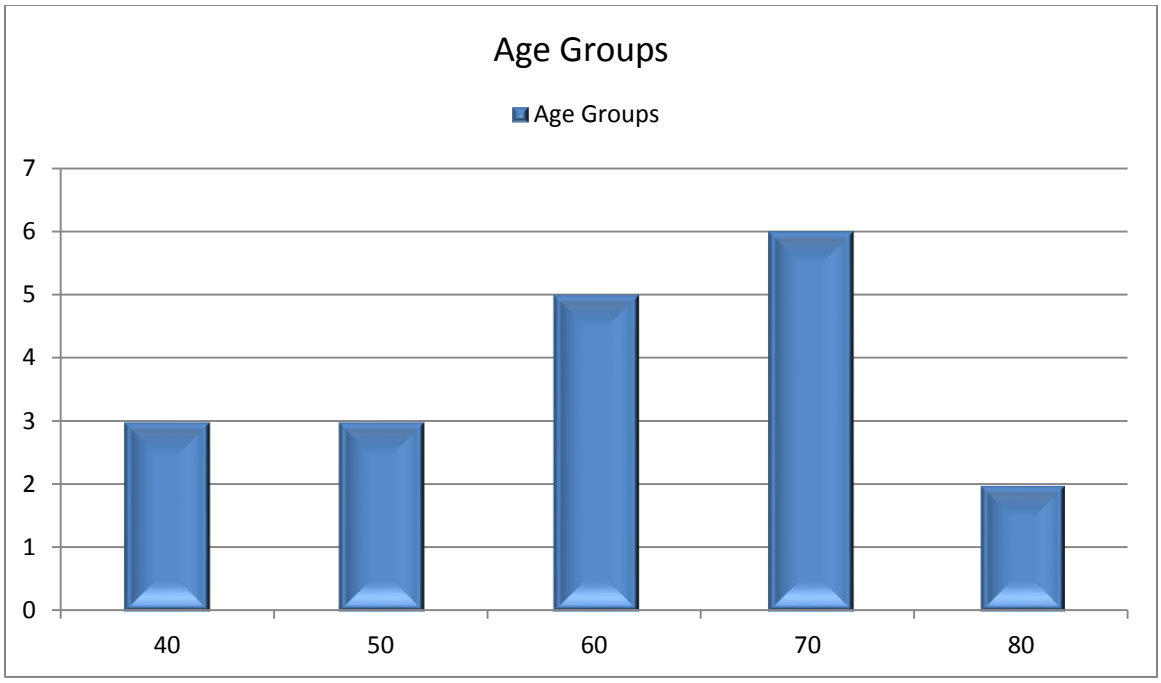


Figure 18. Age Groups

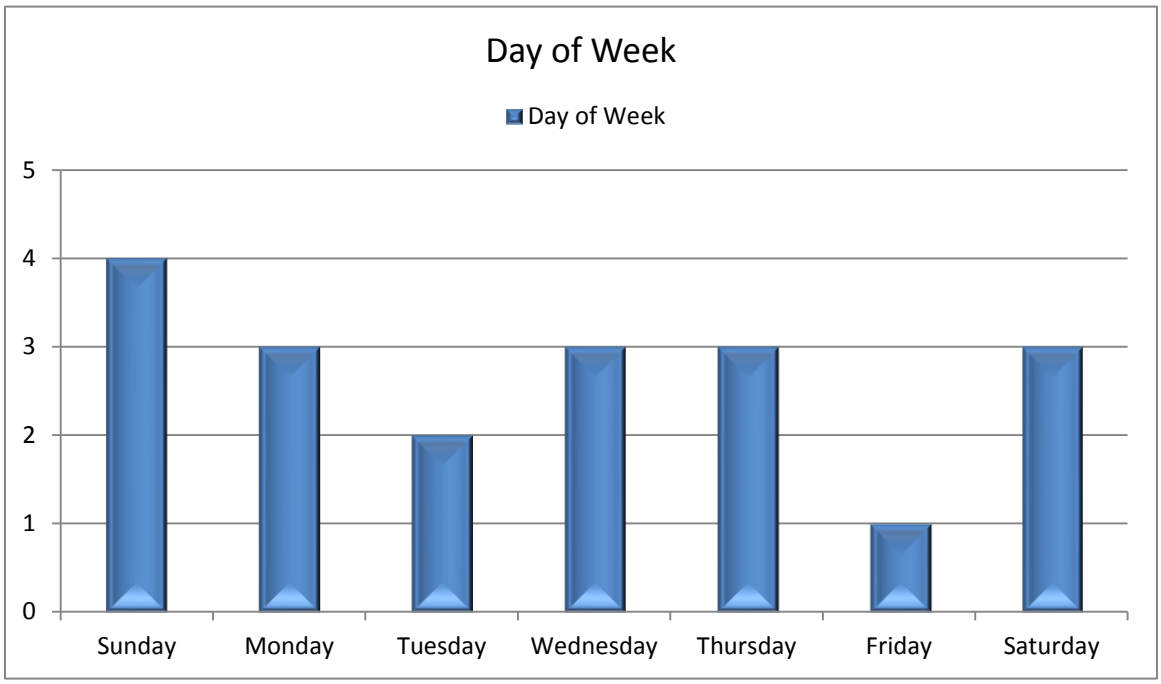


Figure 19. Day of Week

Results Analysis Summary

Prior to the intervention, patient safety aides (sitters) expressed confusion about job responsibilities, frustration over not receiving patient report on what needed to be done for the patient, and having no specific skills training or patient education. As a result of the patient safety aide (sitter) training orientation and competency assessment and validation program intervention, the patient safety aides (sitters) expressed a higher sense of preparedness. The results of the two-tailed, paired sample t-test show that on all six patient safety aide (sitter) evaluation indicators, patient safety aides' sense of preparedness after the intervention (i.e., M = 4.44 to 4.63, SD = 0.57 to 0.67) was significantly higher compared to their average scores before the intervention (i.e., M = 1.59 to 2.03, SD = 0.62 to 1.09): $t_{rel}(31) = 11.83$ to 15.78, $p < .001$). In addition to the six patient safety aide (sitter) evaluation indicators, a two-tailed paired sample t-test was

conducted to assess whether the differences in the self-reported level of preparedness before and after the intervention differ significantly. The results showed the overall level of preparedness before the intervention (M = 10.31, SD = 3.95), was significantly lower when compared to the level of preparedness after the intervention (M = 27.03, SD = 3.14): $t_{rel}(31) = 15.86$, $p < .001$). The mean difference of 16.72 indicated the patient safety aides (sitters) self-report that on average, they are one and half times more prepared now than before the intervention.

Preceding the intervention, hospital staff expressed several issues and frustrations related to patient safety aides' (sitters') ability to provide patient safety care to high-risk patients. The staff complained of the inconsistencies in patient safety aides' (sitters') skill set and performance like bathing, feeding, changing, turning, and taking vital signs. Other issues included patient safety aides (sitters) refusing to be assigned to psychiatric patients or patients with psychiatric issues and failure to document patient observation sheets. The results of the two-tailed, paired sample t-test showed that staff perception of patient safety aides' (sitters') preparedness after the training intervention (i.e., M = 3.97 to 4.14, SD = 0.72 to 0.86) was significantly higher compared to evaluation scores before the intervention (i.e., M = 2.36 to 2.59, SD = 0.99 to 1.19): $t_{rel}(131) = 12.49$ to 13.96, $p < .001$). In addition, a two-tailed paired sample t-test was conducted to assess whether the differences in staffs' evaluation of patient safety aides' (sitters') preparedness before and after the intervention differed significantly. The test results showed that staff overall perception of level of patient safety aide (sitter) preparedness before the intervention (M = 12.55, SD = 4.57), was significantly lower compared to their evaluation after the training intervention (M = 20.19, SD = 3.08): $t_{rel}(131) = 14.94$, $p < .001$). The mean

difference of 7.64 indicated that on average, staff perception of patient safety aides' (sitters') level of preparedness improved by nearly 38%.

Before the implementation of the patient safety aides (sitters) training program intervention, there were a total of 13 instances where patient safety aides (sitters) were present during patient falls. After the intervention, there were a total of six patient fall incidences in the presence of patient safety aides (sitters); representing a 54% drop in patient fall incidents after the training program intervention. The monthly average of patient falls in the presence of patient safety aides (sitters) reduced from 3.25 falls per month before the intervention to two falls per month after the intervention, a 38% drop in monthly patient fall instances with patient safety aides (sitters) present. Despite the fluctuation in the number of falls through the nine month period, the overall trend line showed a marginal but steady decline in the number of falls from June 2015 through February 2016. The mean number of falls before the start of the intervention in October 2015 dropped from 30.75 (SD = 5.25) to 25.6 patient falls (SD = 5.46) for a decrease mean difference of 5.15 after implementation of the intervention.

Patient elopement data was collected for a 12 month period from March 2015 through February 2016. Data collected from March 2015 through September 2015 (7 months) represents the pre-interventional period, while October 2015 through November 2015 (2 months) represents the intervention period, and December 2015 through February 2016 (3 months) represents the post-interventional period. The overall trend line of the patient elopement data showed a marginal but steady decline in the number of patient elopements. The collected patient elopement data also identified six patient elopement risk categories: (1) psych-involuntary committed (IVC), (2) substance abuse,

(3) dementia/cognitive impairment, (4) falls risk, (5) social issues, and (6) medication related; with the dementia/cognitive impairment risk category having the greatest number of patient elopements. The data also identified patient elopements occurred in 5 out of 14 hospital units and age group 70 experienced the most elopements while age group 80 had the least incidence of patient elopements. Additionally, the data also revealed Fridays and Tuesdays had the least number of elopements with Sundays having the most.

Conclusion

With more healthcare facilities using sitters to provide patient safety monitoring and care today, it is paramount that sitters are properly trained and equipped with the tools to do the job effectively. Tzeng et al. (2008) reported that many healthcare facilities utilized untrained sitters, with evidence that this was an ineffective way to provide patient safety care. Rochefort et al. (2011) studied the incredible costs associated with sitter usage and suggested improving staffing, providing more resources, and implementing a combination of other alternatives to lower these expenses.

This stresses the importance of assessing the competency level of the sitters, understanding the deficits of sitters, and evaluating the healthcare facility's skills orientation and training program. More importantly, healthcare educators should properly develop and implement necessary practice changes in providing sitters the tools to be successful in their role, function, and duties. It is clear that a change in practice in how sitters are orientated and trained is crucial to provide, improve, and promote consistent high-risk patient safety monitoring and care. The patient safety aide (sitter) training orientation and competency validation program was able to maximize the use of sitters by providing them with standardized and structured skills training. The program

also demonstrates how the development of an orientation and competency training program for sitters can promote caring science concepts of creating a healing environment, promoting patient and staff trusting relationships, and sustaining human dignity and basic needs (patient safety). This change in practice can foster a more harmonious and conducive working environment between facility staff and sitters, while optimizing efficiency in providing cost-effective high-risk patient safety care.

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Appendix A

Patient Safety Aide Orientation

PATIENT SAFETY AIDE ORIENTATION

Contractor:_____
Validator:_____
Date:_____

GOAL	OUTCOME	VALIDATOR
Forms to be completed: ▪ Complete fingerprinting forms and PIV forms	Completed forms to AO for Nursing-arrange time for fingerprints and PIV badges	Fingerprinting completed by HR Specialist
Read and sign: ▪ Statement of Work ▪ Contract Rules of Behavior	Demonstrates ability to recall Statement of Work & Contract Rules of Behavior and apply to patient care.	
Provide: ▪ NC License Verification ▪ AHA CPR Card (BLS) Health Care Provider	Provides current copy of license and copy of CPR card	
Provide verification of: ▪ PPD ▪ Hep. B ▪ MMR	Provides current copy of Vaccines'.	
Complete TMS Training: ▪ ***PMDB TRAINING COMPLETED BEFORE STARTING ON FLOOR/UNITS*** ▪ Privacy & HIPPA Training ▪ Information Security ▪ Compliance Business Integrity ▪ Flu & You ▪ MRI safety training ▪ Other TMS Trainings as assigned	Knowledge/Understanding verified by successfully passing TMS Training OR Certificate of Completion. ***PMDB (Date of Attendance)*** _____	
Review Duties: ▪ Patient Safety Aide (Sitter) Policy (NSP .14) ▪ Patient Safety Aide Duties ▪ Close Observation	Verbalizes ability to understand ideas and restate understanding through ideas/examples.	
Review Documentation: ▪ Observation Flowsheet ▪ SBAR Tool for 1:1 ▪ Safety ▪ Close Observation MCM558-12-116.10	Demonstrates ability to use materials and understand importance. Completes a sample check sheet for close observation.	
Review Uniform Policy: ▪ Dress Code (NSP .3) MCM 558-13-05.15	Appropriate uniform and name tag of agency with name clearly identified.	

PATIENT SAFETY AIDE ORIENTATION

Contractor:_____
Validator:_____
Date:_____

Review Smoking: ▪ Smoke-Free Policy MCM558-14-001.3	Verbalizes understanding	
Review Attendance: ▪ Work Expectations During Severe Weather MCM558-14-001.4	Verbalizes understanding	
Review Patient Rights: ▪ Rights of VA Patients MCM558-14-008.10 ▪ Care of Disabled Adult and Elder Patients MCM558-12-122.11 ▪ Patient Abuse MCM558-13-118.6	HI CARE – Restates the acronym and identify the actions included H – Hand Hygiene I – Introduce Self C – Confidentiality A – Assess R – Respect E – Evaluate (Ask Velinda Chapman for content) Describe 2 examples of actions to prevent patient abuse	
Review Missing Patient: ▪ Mgmt. of Wandering & Missing Patient Events MCM558-14-008.1	Verbalizes ability to understand ideas and restate understanding through ideas/examples. List first 3 actions to take if patient is missing: 1. Notify RN 2. Describe actions/behaviors 3. Document	
Review Fire Safety: ▪ Fire Drill Procedure MCM558-14-138.11	Verbalizes understanding. List steps.	
Fall Safety	1. Stay with patient 2. Notify RN assigned to patient 3. Do not move the patient 4. Remove all items within reach that may be harmful 5. Report all observations and actions to the RN and document	
Patient Emergencies: ▪ How to call a CODE MCM558-15-111.6	Verbalizes understanding List steps in calling a CODE, RRT, CODE Stroke	

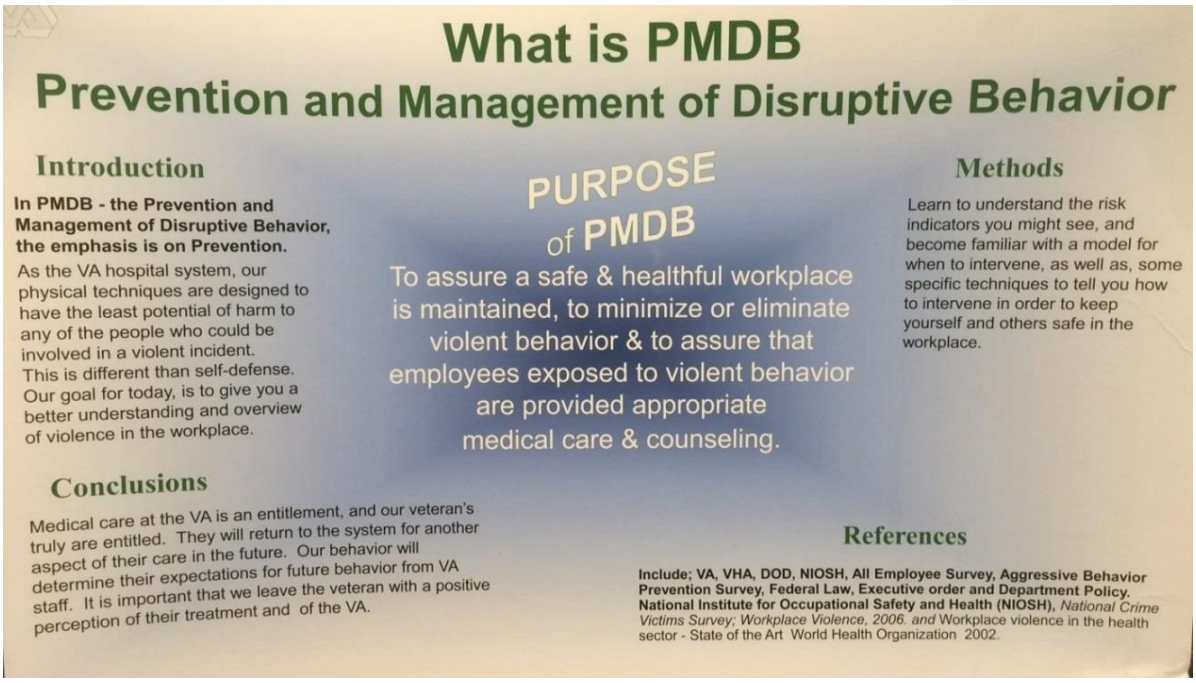
PATIENT SAFETY AIDE ORIENTATION

Contractor:_____
Validator:_____
Date:_____

Infection Control: ▪ PPE MCM558-14-138.25 ▪ Isolation Signage ▪ Hand Hygiene ▪ Exposure Control Plan for Blood borne Pathogens ▪ Infectious Waste Disposal MCM558-14-137.1	Effectively demonstrates understanding of PPE and employ use of equipment. 1. Effectively demonstrate application of PPE 2. Identify contact isolation sign 3. Describe disposal of infectious waste 4. At conclusion of assignment, give formal report to RN, sign out	
Assignments: ▪ Review Patient Assignment Sheet ▪ Assignment Sheet Location	Verbalizes understanding Describe actions upon coming on duty. 1. Report to C5013 for assignment, initial arrival and time of arrival 2. Report to Charge Nurse, obtain patient report from RN 3. At conclusion of assignment, give full patient report to RN, sign out	
Time Card: ▪ Review Time Card Documentation	Effectively documents on Time Card. Demonstrate accurate system in/out.	
Tour: ▪ OTC Office (C5013) ▪ Clinical Areas (6A, 6B, 7A, 7B, 9A/B, MICU, SICU, CCU) ▪ ED ▪ CLC (CLC1, Hospice, CLC2A, CLC2B)	Able to Recall Clinical Areas	
TEST: ▪ Patient Safety Aide TEST	Able to Recall and Apply knowledge learned during orientation	

Appendix B

PMDB In-Service Class



Appendix C

Patient Safety Aides (Sitters) Pre- and Post-Test Survey

Patient Safety Aides (Sitters) Pre-Test Survey

Please circle one response for each of the following items

		Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*
1.	**I am comfortable in interacting with high-risk patients (eg. combative, aggressive, agitated, SI, HI, elopement, IVC, etc).**	**1**	**2**	**3**	**4**	**5**
2.	**I feel prepared to provide direct patient care to high-risk patients (eg. combative, aggressive, agitated, SI, HI, elopement, IVC, etc.).**	**1**	**2**	**3**	**4**	**5**
3.	**I know how to protect the patient, myself, and others when a patient becomes combative, aggressive, or agitated.**	**1**	**2**	**3**	**4**	**5**
4.	**I know how to identify a potential elopement risk, SI, or HI patient.**	**1**	**2**	**3**	**4**	**5**
5.	**I know how to safely prevent a patient from eloping.**	**1**	**2**	**3**	**4**	**5**
6.	**I understand my role, function, and duties as a Patient Safety Aide (Sitter)**	**1**	**2**	**3**	**4**	**5**

Patient Safety Aides (Sitters) Post-Test Survey & Program Evaluation

Please circle one response for each of the following items

		Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*
1.	I am comfortable in interacting with high-risk patients (eg. combative, aggressive, agitated, SI, HI, elopement, IVC, etc).	1	2	3	4	5
2.	I feel prepared to provide direct patient care to high-risk patients (eg. combative, aggressive, agitated, SI, HI, elopement, IVC etc.).	1	2	3	4	5
3.	I know how to protect the patient, myself, and others when a patient becomes combative, aggressive, or agitated.	1	2	3	4	5
4.	I know how to identify a potential elopement risk, SI, or HI patient.	1	2	3	4	5
5.	I know how to safely prevent a patient from eloping.	1	2	3	4	5
6.	I understand my role, function, and duties as a Patient Safety Aide (Sitter).	1	2	3	4	5

Please rate the efficacy of the Patient Safety Aides (Sitters) orientation and competency validation training program

		Strongly Disagree	*Disagree*	*Neutral*	*Agree*	*Strongly Agree*
1.	This program prepares me to provide direct patient care to high-risk patients.	1	2	3	4	5
2.	PMDB provides me with the tools to work with high-risk patients.	1	2	3	4	5

Appendix D

DVAMC Staff Patient Safety Aide (Sitter) Evaluation

Please circle one response for each pair of *Before* and *After* question

		Before					After				
		Strongly Disagree	***Disagree***	***Neutral***	***Agree***	***Strongly Agree***	***Strongly Disagree***	***Disagree***	***Neutral***	***Agree***	***Strongly Agree***
1.	**Patient safety aides are asking for patient report for their patient assignment.**	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**
2.	**Patient safety aides are providing direct personal patient care (e.g. toileting, bathing, ADL's, feeding, ambulation, etc.).**	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**
3.	**Patient safety aides understand the different types of observations (eg. 1:1, 2:1, arms-length, eye-view).**	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**
4.	**Patient safety aides are reporting patient condition changes to the patient's nurse or Unit Charge RN.**	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**
5.	**Patient safety aides are providing observation documentation on their assigned patient(s) if applicable.**	**1**	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**