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### Evaluation of the Patient Sitter Assessment Tool

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# EVALUATION OF THE PATIENT SITTER

## EVALUATION OF THE PATIENT SITTER ASSESSMENT TOOL

by

Tamara L. DeSousa

A Major Paper Submitted in Partial Fulfillment

of the Requirements for the Degree of

Master of Science in Nursing

in

The School of Nursing

Rhode Island College

2011

# EVALUATION OF THE PATIENT SITTER

## Abstract

Maintaining the safety of hospitalized patients is a top priority in healthcare. Evidence has demonstrated that most patient injuries associated with falls are preventable. Despite major, sustained national initiatives related to fall prevention, fall rates continue to be problematic in acute care settings. Patient sitters are often used to observe/and or assist those that are identified as at a high risk for falls; however evidence to support the effectiveness of this intervention in reducing fall risk is lacking. A committee charged with revising the sitter policy in an acute care facility discovered inconsistencies by nurses when assessing this patient population. A literature review revealed common contributing factors to a change in cognition and delirium, both having strong relationship to patient falls. A Patient Sitter Assessment tool was developed and pilot tested on a 27 bed medical surgical telemetry unit. The purpose of this process improvement project was to determine the ease of use, utility, and staff satisfaction of the tool. Evaluation from 12 staff nurses who participated were favorable. Overall, nurses indicated satisfaction with the tool, and provided feedback that more education on delirium and contributing factors that impact cognition was needed. It is expected that use of the tool will result in earlier detection and treatment of change in cognitive status and improved sitter use. Implications and recommendations are presented and discussed.

# EVALUATION OF THE PATIENT SITTER

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## Evaluation of the Patient Sitter Assessment Tool

### **Background/Statement of the Problem**

One of the most critical issues facing healthcare daily is patient safety. The Institute of Medicine (IOM) released a report in November of 1999 entitled *To Err is Human: Building a Safer Health System* (Kohn, Corrigan, & Donaldson, 2000). It described preventable hospital errors that had occurred in the United States (US), resulting from 44,000 to as many as 98,000 deaths each year. The specific intent was to examine processes in the system that contributed to these deaths rather than focusing on individual competency of clinicians. The National Patient Safety Goals (NPSGs), developed in 2002 by The Joint Commission, were designed to specifically address processes and protocols that impact patient safety. These goals were established to assist accredited organizations to address specific safety related areas of concern. Goals are updated annually by a multi-disciplinary team of patient safety experts and the Patient Safety Advisory Group. Together, these groups undertake a systematic review of the literature and determine the highest priority for the ongoing revision of the NPSGs (The Joint Commission [TJC], 2010a). In the current NPSGs (2010), the reduction of risk of patient harm resulting from falls continues to be a focus, as it has been since 2005.

Falls are the third most common cause of unintentional injury death and the leading cause of such deaths among older adults (Centers of Disease Control and Prevention [CDC], 2009). Consistent, ongoing assessment to determine risk for falls as well as implementing interventions to reduce falls is imperative to maintain patient safety. These efforts can ultimately improve outcomes and decrease medical costs (Spetz, 2007). One of the documented risk factors for falls in the inpatient setting is cognitive dysfunction, most

notably agitation, confusion, and impaired judgment. The Institute for Clinical Systems Improvement (ICSI) has developed a document entitled *Health Care Protocol: Prevention of Falls* (Acute Care) (2010). In this review of the literature, the authors identified multiple systematic reviews and original articles demonstrating that patients with delirium or acute confusion, often characterized by confusion, agitation, and disruptive behaviors, are at higher risk of falls. The National Institute of Health (NIH) reported that 2.5 million hospitalized older adults experience delirium every year (NIH, 2007). Delirium is described as a disturbance of consciousness and a change in cognition that can occur over the course of a few hours to days (British Geriatric Society [BGS] and Royal College of Physicians, 2006). Delirium is characterized by a disturbance of consciousness, global cognitive impairment, disorientation, the development of perceptual disturbance, and attention deficits, with sleep and wake cycles that can be irregular (Maldonado, 2008). Other potential risk factors for the development of delirium are age (usually older than 65), medical illness, dehydration, dementia, medications, multiple procedures, depression and alcohol withdrawal, or any insult to an individual patient including poorly managed pain (Farley & McLafferty, 2007; Milisen, Lemiengre, Braes, & Foreman, 2005). Nurses do not often associate these difficult to manage behaviors with delirium; instead, they can be mistaken for dementia (Lakatos et al., 2009).

The ability of bedside clinicians to recognize delirium as a modifiable risk factor for falls and unsafe behavior can improve management and potentially lead to improved outcomes (ICSI, 2010). Nurses at the bedside are not as aware of the hypoactive form of delirium which can thus go undetected, potentially increasing negative outcomes (Farley & McLafferty, 2007).

Research led by advanced practice nurses (APNs) at Brigham & Woman's Hospital included a retrospective chart review of 252 hospitalized patients who had documented falls (Lakatos et al., 2009). The purpose was to determine the prevalence of delirium associated with those events along with the frequency that delirium was not diagnosed. Severity of falls, demographics, and criteria suggestive of delirium (abnormal lab values, cognitive impairment and recent procedures) from the day of admission, day of fall, and two days prior to the fall were reviewed. Their hypothesis that delirium was an important risk factor for falls was supported by the data collected. Conclusions strongly suggested that improving recognition of undiagnosed delirium can lead to decreased lengths of stay and improved patient outcomes. This study confirmed that one of the most important risk factors for falls could be delirium.

In a systematic review reported in the Oxford Journal on Age and Aging (Oliver, Daly, Martin, & McMurdo, 2004), reoccurring themes associated with patient falls were agitation, confusion, or impaired judgment. Delirium is identified in the literature as an important contributor to falls and as such a potential cause of sitter requests (Lakatos et al., 2009). Patient sitters have been instituted to decrease risk of falls and improve patient safety in acute care hospitals (Tzeng, Yin, & Grunawalt, 2008). Disruptive behaviors, often associated with delirium, are the reason identified for a sitter (Dahlke & Phinney, 2008). Sitters can assist in decreasing restraint use and in reducing the number of falls resulting in patient injury (Lakatos et al., 2009). It was noted that strategies to minimize sitter use have not proven effective to maximize patient safety (Baron, 2009). The author described the risks that sitters address, including suicide, harm to self from falls, dislodging IV lines or tubes, and elopement risk.

The members of a committee at the local Veterans Administration (VA) hospital were charged with revising the patient sitter policy. The members consisted of two nursing academy

faculty, a nurse educator, nurse manager, nursing supervisor, and a nurses' aide who often assumes the sitter role. The initial intent was to clarify confusion in the policy as experienced by bedside clinicians. The unit based-council from 5B (comprised of six RN staff members from each shift, a nursing academy faculty member, and nurse educator) were in the process of developing a guide for bedside nurses to use when assessing a confused/difficult to manage patient. Between these two committees, a common question emerged as to how assessment was done prior to initiating a sitter. An informal survey of the nursing staff revealed that assessment of a confused, difficult to manage patient was inconsistent. As a result of discussions from both committees, it was noted that sitters had been requested by nursing as a safety intervention before they had completed a systematic and comprehensive assessment of the patient.

The committee completed a review of the literature. Several articles of interest were identified as relevant. Sammer, Lykens, Singh, Mains, & Lackan (2010) reviewed literature on the culture of safety within US hospital settings. One finding clearly supported evidenced-based standardizations of practice to reduce variations in care. Based on this work and the review of the literature, the committee approved development of a Patient Sitter Assessment Tool (Appendix A) to provide the bedside Registered Nurses (RNs) with a comprehensive, systematic guide to evaluate patients prior to initiating a sitter. The actual development of the tool was performed by the writer, with support of the committee. Embedded within this tool is the short version of the Confusion Assessment Method (CAM) (Inouye et al., 1990) that was designed to allow non-psychiatric clinicians to quickly and efficiently detect delirium. It was proposed that this performance improvement measure would increase the culture of safety by instituting an evidenced based protocol for assessing a patient with a change in cognition more efficiently.

The purpose of this project was to determine the ease of use, nurse satisfaction, and utility of The Patient Sitter Assessment Tool.

### Review of Literature

An extensive review of the literature was conducted using the following databases: Pub Med, Medline, CINAHL and Google Scholar. Keywords searched included falls, patient sitters, patient safety, confusion, delirium, and assessment tools.

#### Patient Safety in Acute Care Hospitals

The IOM committee, after releasing its report *To Err is Human: Building a Safer Health System*, recommended that healthcare organizations create a culture of safety as an organizational goal driven by leadership (Kohn et al., 2000). To improve the safety and quality of healthcare systems, key strategies need to be in place, including effective teamwork, communication, and instituting a culture of safety within acute care settings (Hughes, 2008). Regulatory agencies serve to ensure that healthcare systems have protocols in place to promote patient safety that are based on current evidence. One of these agencies is TJC, a non-profit organization whose mission is to continuously improve healthcare by evaluating organizations that serve the public to ensure safe and effective care that is of the highest quality and value (2010b). TJC instituted the NPSGs in 2002, the purpose of which was to highlight current risks in healthcare that impact patient safety. The intent of the goals is to stimulate health care organizations to improve processes for several of the most challenging patient safety issues. Patient safety experts from the bedside, including all disciplines involved with patient care, are members of a Patient Safety Advisory Group that teams with TJC staff to annually revise the goals based on review of current literature (TJC, 2010a). A consistent goal since 2002 has been reduction in the risk of patient harm from falls. Specifically, goal number nine addresses prevention of falls, which has existed annually since 2005. Elements of this goal include patient assessment, interventions to reduce the risk of falls, and education to be provided to staff,



patient, and families in relation to fall risk and prevention. The effectiveness of these elements will continue to be evaluated and revised as appropriate (TJC, 2010a). Despite improvements in processes to address risk factors for falls, falls continue to plague the vulnerable hospitalized patient, leading to increased length of stays (LOS) and increased costs. Falls have been demonstrated to negatively impact morbidity and mortality (Lakatos et al., 2009).

### **Falls in Acute Care Hospitals**

In the US, one third of adults older than age 65 fall each year (CDC, 2009). Patient falls in acute care settings continue to occur despite efforts to screen patients who are at risk (Lakatos et al., 2009) and measures to promote safety in the environment (Tzeng, Yin & Grunawalt, 2008). Risk factors for falls can be categorized as intrinsic (weakness, gait disturbances, cognitive disturbances, mental status changes, dizziness, hypotension, polypharmacy, incontinence and chronic illness) and extrinsic (cluttered environment, lighting, cords, spills and hazardous activities) (Currie, 2008; VHA NCPS Fall Prevention and Management, 2009). As derived from an analysis of fall risk factors and risk assessment literature, five risk factors for falls in acute care were consistently identified: impaired mental status; altered elimination; sensory deficits; limited mobility; and unsteady gait (Oliver et al., 2004).

In 2008, the Centers for Medicare & Medicaid Services (CMS) developed a list of eight hospital acquired conditions (HACs) that contributed to increased lengths of stay and lead to increased cost. Inpatient falls were included on the list of preventable HACs and were identified as a contributing factor to increased costs and morbidity. CMS documented that the estimated cost of a fall in fiscal year 2008 was \$33,894 per hospital stay, with a total number of reported falls at 193,566 (CMS, 2008). Due to the increase in CMS reimbursement for conditions related to falls, a revision was proposed for the classification of falls during fiscal year 2009. Falls were



expanded from “falls out of bed” in 2007 to “falls and trauma” in 2008, to include fractures, dislocations, intracranial injuries, crushing injuries, burns, and electric shock (CMS).

Falls have been associated with delirium in the hospitalized patient (Lakatos et al., 2009), a clinical problem that is highly prevalent in acutely ill patients.

### **Delirium**

According to the US Department of Health and Human Services (USDHHS, 2004), delirium occurs in 2.5 million elderly patients each year and is the leading complication in hospitalized older adults (Young & Inouye, 2007). Delirium is defined as an acute disturbance in cognition and attention that can be transient and is often related to medical disorders, medication, and intoxication (Auchus, 2007). Delirium is characterized by fluctuations in attention and cognition that occur suddenly, especially in the elderly, and may be preventable (Fearing & Inouye, 2009). Delirium can present as hypoactive or hyperactive behaviors or it can fluctuate between both (Waszynski, 2007). Precipitating factors for developing delirium in hospitalized elderly patients can be attributed to treatment of complex medical conditions and physical environments or both (Aguirre, 2010; Fearing & Inouye, 2009).

Risk factors for the development of delirium vary from patient to patient and include age, severity of illness, pre-existing cognitive impairment, co-morbidities, and exposure to medications, in particular sedatives and narcotics. Other identified risk factors include foley catheters, restraint use, decrease in functional status, and lack of adequate nutrition and hydration (BGS and Royal College of Physicians, 2006). Overall, the probability of developing delirium appears to be strongly related to the individual patient's baseline risk (Trzepacz & Meager, 2008). Inouye et al. (1999) noted a correlation existed between the number of risk factors and the probability of patients developing delirium. Precipitating factors are a result of external

stressors, medications, surgery, especially emergency surgery, and acuity of illness (Trzepacz & Meager, 2008).

Prevention and early identification of delirium is key. Delirium is considered a serious medical issue requiring emergent treatment to minimize its' impact on morbidity and mortality (Inouye, 2006). Assuring adequate sleep cycles, preventing dehydration, decreasing anxiety, avoiding contributing medications, assessing for adequacy of bowel patterns, better management of pain, and minimizing environmental factors are nursing interventions that can decrease delirious states (BGS and Royal College of Physicians, 2006; Dahlke & Phinney, 2008; Fearing & Inouye, 2009). Vigorous management of health problems including infections and electrolyte imbalances are critical.

Delirium can have lasting negative outcomes once it has occurred (Maldonado, 2009). Cognitive and functional decline can occur in patients with delirium, leading to long term consequences including repeat hospitalizations, institutionalization, rehabilitation, and need for ongoing health care services. These factors add to the financial cost and stress to patients and their families. In vulnerable patients, especially the elderly, cognitively impaired, and those with dementia, prognosis and consequences can be worse (Inouye, 2006). The National Guidelines for the prevention and management of delirium in older people developed by the British Geriatric Society (2006) list falls as one of the main complications of delirium.

Delirium is frequently under recognized by bedside clinicians ( Farley & McLafferty, 2007; Law, 2008), can be different from patient to patient, and even exhibit differently in one patient over time (Maldonado, 2009). Due to the variety of behaviors that patients with delirium exhibit, such as restless, anxiety, irritable, hypoactive, and somnolence, detection can be difficult (Inouye et al., 1990). Timely discovery by using a screening tool (Lakatos et al., 2009) is key.

Providing the bedside nurse with a tool to standardize assessment of patients with acute confusion and difficult to manage behaviors can assist in detecting delirium in a timely manner and prevent delay in treatment, ultimately improving outcomes (Lakatos et al.).

### **Confusion Assessment Method (CAM)**

There are multiple valid instruments to assess for delirium in practice including the Mini Mental State Examination (MMSE) (Folstein, Folstein, & McHugh, 1975) and the NEECHAM Confusion Scale (Neelon, Champagne, Carlson, & Funk, 1996); both of these are used to measure cognitive impairment. The MMSE contains questions to assess orientation, recall, attention, short term memory, and language. Limitations to this instrument include false positive results when assessing patients with higher levels of intelligence and education. Other factors that may produce unreliable results are advanced age, minimal education, sensory disabilities, and use with individuals from foreign cultures (Ismail, Rajji, & Shulman, 2010). The NEECHAM Confusion Scale instrument contains three subscales that include information processing, behavior, and performance. These subscales allow the clinician to observe the patient during nursing practice but can take up to 20 minutes to complete (Farley & McLafferty, 2007).

The Delirium Rating Scale (DRS) can assist bedside clinicians to identify severity of delirium symptoms and evaluate the effectiveness of treatment. The DRS contains ten items: temporal onset of symptoms; perceptual disturbances, hallucination type; delusions; psychomotor behavior; cognitive status; physical disorder; disturbances in sleep wake cycle; fluctuation of mood; and variability of symptoms. It is recommended to be used over a period of at least 24-hours. One part of this tool requires the user to provide subjective evaluation of the patient's ability (Trzepacz, Baker, & Greenhouse, 1988). Limitations include length of time

needed to detect delirium and is generally applied by psychiatrically trained clinicians versus non psychiatric clinicians (Trzepacz & Meager, 2008).

Another instrument used in the detection of delirium is the Memorial Delirium Assessment Scale (MDAS) (Breitbart et al., 1997). Memory, attention, and level of consciousness are some of the items included in this tool. The MDAS provides the bedside clinician with the ability to complete a guided assessment in 10 minutes and can be repeated throughout the day to detect changes in severity (Breitbart et al.). While the MDAS is used as a measurement for determining the severity of delirium, the Confusion Assessment Method (CAM) (Inouye et al., 1990) was developed for diagnosing delirium.

Improving the quality of life for older persons has been the focus of Dr. Sharon Inouye's research. Dr. Inouye's work has clearly documented that delirium impacts the cognitive and functional status of hospitalized patients leading to poor outcomes (Spivack, 2010). In 1990, Sharon Inouye MD and an expert panel developed the Confusion Assessment Method to aide non-psychiatric clinicians to detect delirium quickly. The definition of delirium used as the basis of the CAM was derived from the *Diagnostic and Statistical Manual of Mental Disorders III* (American Psychiatric Association, 1987). The CAM is a standardized tool with four features to assess if delirium is present:

1. mental status altered from baseline
2. inattention
3. disorganized thinking
4. altered level of consciousness

Delirium is identified if there is evidence of features 1 and 2, and either 3 or 4 (Inouye et al., 1990). There are two versions of the CAM available for clinicians to use. The long version is

more comprehensive and further defines the four features that are the basis of the CAM. The short version includes the four features that best clarify delirium from other cognitive impairments (Inouye et al.). The short version can be completed in five minutes along with an assessment (Waszynski, 2007). There are now other versions such as the CAM-ICU, with similar demonstrated sensitivity and specificity for assessing ventilated patients utilizing non verbal tasks for detection of delirium (Ely et al., 2001).

The short version of the CAM has a documented sensitivity (94%-100%), specificity (90%-95%), and accuracy (91%-94%), along with a high inter-observer reliability cited (Inouye et al., 1990; ICSI, 2010). As a screening tool, the CAM demonstrates significant accuracy in identifying patients with delirium (Maldonado, 2009). In a systematic review of 19 studies examining multi-component intervention strategies for managing delirium in hospitalized older people (Milisen et al., 2005), all but one study used the CAM.

Reliable, valid, and user friendly assessment measures are extremely useful in practice to detect delirium. Screening tools are essential for the detection of delirium, and the CAM is considered to be the gold standard (Dahlke & Phinney, 2008). Dahlke and Phinney spoke with 12 Registered Nurses about how they faced challenges in caring for older hospitalized adults at risk for delirium. This qualitative study was designed to bring attention to an often unspoken aspect of nursing practice, caring for adults at risk for delirium. A common theme identified was lack of education for the staff to better serve this population. One key point that emerged was that assessments were done quickly and inconsistently, with sitters or restraints used to care for confused older patients.

### **Restraint and Sitter Use in Acute Care Hospitals**

CMS regulations consider a restraint any manual method, physical or mechanical device, material, or equipment that immobilizes the ability of a patient to move any part of their body freely (USDHHS, CMS, 2006). Cognitive impairment and unsafe behaviors are common terminology used in association with restraint use and falls in patients with suspected delirium (Aguirre, 2010; Fearing & Inouye, 2009; Lakatos et al, 2009; Waszynski & Petrovic, 2008). Restraint use has been documented as a precipitating factor for delirium along with bed rails, indwelling catheters, dehydration, and underlying infections (Lyons, Grimley & Sydnor, 2008; Farley & McLafferty, 2007). Application of physical restraints in many instances can elevate levels of agitation, with the potential for other adverse outcomes including skin breakdown, decreased functional status, and prolonged delirium (Inouye et al., 2007).

Restraint use and sitters have been used by hospitals to improve patient safety (Tzeng et al., 2008); however, evidence exists in the literature that restraint use to prevent falls actually increases fall rates and can be a precipitating factor and risk for ongoing delirium (Inouye et al., 2007). A study by Inouye et al. (2007) examined the association between delirium at discharge and risk factors that were present during hospitalization. The investigators hypothesized that baseline risk factors (comorbidities) and precipitating factors (iatrogenic events) would elicit a higher risk of delirium at discharge. One of the conclusions of this study was that out of five common risk factors that emerged for the development of delirium, four were manageable with interventions. One of these four was restraint use during the episode of delirium.

Confusion, disorientation, and combativeness, classic signs of hyperactive delirium, when noted in acute care patients, were mentioned as common reasons for why nurses initiated a sitter request (Dahlke & Phinney, 2008). Primary literature on patient sitters is limited. However,



sitters are referenced in numerous articles (Dahlke & Phinney, 2008; Salamon & Lennon, 2003) as an intervention used to prevent patient injury due to falls (Lakatos et al., 2009; Tzeng et al. 2008) as an alternative to restraints for prevention of removal of medical devices, and ultimately to maintain patient safety (Aguirre, 2010). Research has examined the cost savings associated with sitter utilization when an APN was conducting the initial assessment of a patient requiring a sitter (Linck & Phillips, 2004). An important theme was lack of a comprehensive assessment tool to guide the bedside registered nurse to determine the underlying causes of unsafe behavior that prompted a sitter request (Lakatos et al., 2009).

One retrospective descriptive study reported on the effectiveness of adopting a Patient Attendant Assessment Tool (PAAT), specifically related to request for a sitter, restraints use, and falls (Tzeng et al., 2008). The PAAT was developed as an initiative to improve quality and cost efficiency of sitter usage by a committee comprised of three clinical nurse specialists, three nurse managers, and one business operation administrator. The leaderships' goal for the committee was to develop a tool that would decrease sitter usage by instituting a more efficient assessment by nursing and physicians. The hope was that this would lead to a decrease in inpatient falls and injuries from falls. The intent of the tool was to provide a guide for the bedside clinician to assess the needs for sitters in patients' who exhibited unsafe behaviors. It was anticipated that this would lead to a more efficient use of sitters. Listed in the body of the tool were 'risk factors' that described difficult to manage behaviors. This measure did not include any specific assessment related to delirium, only a notation described as asking if there were behavioral or cognitive issues. The tool was piloted for less than two years on two acute adult medical units. One noted result was an increase in sitter requests and a decrease in soft limb restraints. The fall injury rate increased despite the increase in sitter usage. However, it was suggested that lack of

consistency of nursing staff resulted in the delivery of care that was not consistent.

Recommendations included use of a similar guide when assessing a patient prior to requesting a sitter, along with attention to staffing and infrastructure to impact a culture of safety. Not included was an evaluation by the nurses on ease of use or satisfaction with the tool.

Algorithms were identified in the literature, and most used a decision making tool that listed alternatives to implement prior to initiating a sitter (Salamon & Lennon, 2003; Torkelson & Dobal, 1999). Examples included moving the patient closer to the nurses' station, diversional activities such as providing objects for the patient to hold, ambulating with staff, folding clothes, or other repetitive activities. Calling in a patient's family member to assist with orientation, or frequent toileting to minimize attempts of getting up unsupervised, are other alternatives that have been explored to reduce fall risk (Tzeng et al., 2008). A recent study by Shever, Titler, Mackin and Kueny (2010) included interviews of 140 nurse managers from 51 hospitals within the US about their perception of nursing practices around fall prevention on the medical surgical units they supervised. Sitter use was documented by 68% of the respondents as one of the top three most commonly used fall prevention interventions. Bed alarms and rounds on the unit by staff were identified as number one and two. Although these interventions reported by the respondents as used in practice to reduce fall rates, the authors noted that very little evidence existed to support these interventions. The conclusion demonstrated that the evidence to support interventions that impacts fall rates is not consistently used in practice. It was suggested that interventions should be targeted to specific risk factors for the individual patient versus a blanket approach for patients meeting criteria as a fall risk. The discussion included that a nursing assessment can identify a specific risk factor for falls (i.e.: impaired mobility related to hip surgery; altered elimination related to administration of a diuretic) that can be connected to an



evidence based intervention located in policies and nursing literature. Shever et al suggested use of the electronic medical record as a means to assist in determining risk for falls obtained from specific patient information.

Processes and guidelines for care based on evidence can prevent patient harm as documented by TJC. Delirium has been consistently associated with falls, and can be a result of unaddressed or overlooked physiological and environmental factors that contribute to delirium. Instruments, specifically the CAM, have been identified in the literature as valid, efficient, and effective when used by non psychiatric clinicians to detect delirium. The literature described various attempts to reduce patient injury related to falls through implementing sitters and restraints, but evidence is lacking to support these interventions. In summary, the literature reviewed is designed to improve processes for early recognition of risk factors for delirium. Attempts to identify the etiology of the change in a patients' baseline cognitive status, based on evidence, can potentially impact patient safety and quality of care delivered.

The purpose of this project was to determine the ease of use, nurse satisfaction, and utility of the Patient Sitter Assessment Tool.

### Theoretical Framework

Shewhart's Cycle for Learning and Improvement (1934) was the framework used to guide development of this project. The roots of healthcare quality improvement started in the business industry in the 1920s and 1930s. One of the pioneers of quality improvement was Walter Shewhart, a statistician with a doctorate in physics. Dr. Shewhart became interested in this process when working for Bell Laboratories in Chicago as a quality engineer for telephone equipment when noticing the number of product defects. He later refined his work during multiple academic positions, including as a professor at Massachusetts Institute of Technology (MIT). Shewhart concluded that developing standardized procedures decreased variation that can occur during assembly, which had the potential to positively affect the final product (Best & Neuhauser, 2006).

The Shewhart Cycle, also known as the Plan Do Study Act (PDSA) framework (Shewhart, 1934), was used to guide development of this quality improvement project. This framework uses a four step process in the testing and implementation of quality improvement projects. The four steps look to *identify* what to improve, *understand* the problem, *develop* what changes will improve the problem, and *test* the proposed intervention to determine if it meets the aims of the project (Best & Neuhauser, 2006). The cyclical process of this framework allows for a planned change to occur on a small scale. The planner is then able to implement the change, evaluate the effectiveness, and revise and refine, using feedback obtained, to implement on a larger scale. The PDSA model has been used by various quality improvement agencies, including the Institute for Healthcare Improvement (IHI) (Hughes, 2008).

For the purposes of this project, two phases will be addressed: what is done and the process of how it is done. An assessment of how the PDSA was used to guide this project identifies:

(1) Plan. It was determined that a uniformed approach to assessing a patient with a change in baseline did not exist. The decision was made to develop a standardized tool and pilot it;

(2) Do. The Patient Sitter Assessment Tool was developed as will be described (see Methods);

(3) Study. The volunteer participants (RNs) tracked the ease of use, utility, and satisfaction with the tool in the detection of delirium and its contributing factors;

(4) Act. The feedback received via an evaluation survey after the tool had been used in bedside practice for one month was examined and will contribute to revisions and the process of acting on what was learned, to refine the tool.

## **Methods**

### **Purpose**

The purpose of this project was to determine the ease of use, nurse satisfaction, and utility of the Patient Sitter Assessment Tool.

### **Design**

An educational intervention and post evaluation survey was used.

### **Site**

The Providence VA Medical Center (PVAMC) provides comprehensive inpatient and outpatient care to veterans who live in Rhode Island and Southeastern Massachusetts. Presently there are 73 general medical and surgical inpatient operating beds.

### **Sample**

A pool of 30 RNs existed on one unit at the PVAMC, representing varying educational levels that ranged from Associate degree to Master's. Four per diem RNs were ineligible, leaving 26 RNs eligible to participate. Float RNs from other areas within the PVAMC were excluded.

### **Development of the Patient Sitter Assessment Tool**

The initial intent of the newly formed Patient Sitter Committee was to clarify confusion experienced by bedside clinicians related to the existing policy. An informal survey of the nursing staff revealed that assessment of a confused and/or difficult to manage patients was inconsistent. Observations and discussions by the committee led to the conclusion that use and assignment of sitters were inconsistent. Assessment of the patient requiring a sitter was based on the individual practice of the nurse and/or Licensed Independent Practitioner (LIP). After exploration of the literature, the committee members discovered common contributing factors

that impact cognition and that lead to behaviors that precede sitter use (BGS, 2006; Dahlke & Phinney, 2008; Fearing & Inouye, 2009). The conclusion derived from the literature was that education, along with a more consistent comprehensive assessment, was needed to improve sitter use as well as detection of delirium and its contributing factors (BGS, 2006; Fearing & Inouye, 2009).

The Patient Sitter Assessment Tool (Appendix A) was developed to address detection of delirium, the underlying causes that can contribute to a change in cognition, and as a means to more appropriately assess the need for a sitter (Milisen et al., 2005). There is potential to minimize errors of omission when a standardized approach is in place (Hales, Terblanche, Fowler, & Sibbald, 2007). The tool was designed by this author to allow bedside nurses a guide that was simple and quick to efficiently detect delirium without impacting workloads (Siddiqi et al., 2006) and to also better inform the decision about whether a sitter was indicated.

The Tool was constructed with two parts. Part I was developed based on the literature that identified key assessments that nurses needed to identify, including contributing factors to a change in a patient's baseline (Aguirre, 2010). After reviewing different screening tools for delirium, it was decided to incorporate the short version of the CAM into the second part of the Assessment Tool. This was based on its documented ease in use (Waszynski & Petrovic, 2008) and its established psychometric qualities. The short version has a sensitivity of 94%-100%, specificity of 90%-95%, and accuracy of 91%-94%, and is able to be completed in five minutes (Inouye et al., 1990). The reliability of the CAM has been documented as 84%- 100%, depending on the training of those administering it (Waszynski, 2007).

## **Procedures**

Prior to conducting this project, approval was obtained by the Institutional Review Board (IRB) at Rhode Island College (RIC). The Providence VA Medical Center reviewed the proposal and determined that IRB review was not required.

Nurse volunteer participants were recruited by an IRB approved recruitment flyer posted on the bulletin board (Appendix B) in the nurses' break room. Volunteers were instructed, per the flyer, to e-mail their decision to participate in this project to [tamara.desousa@va.gov](mailto:tamara.desousa@va.gov). Before beginning the intervention, consent was obtained using an IRB approved consent document (Appendix C). The consent described that participation was voluntary and self termination of involvement at anytime during this project was without prejudice. The participants received a copy for their own records and the primary investigator kept the signed copies in a locked file in a locked office at the Providence VA Medical Center.

Participation involved attending two 30 minute educational sessions. Multiple selected time and dates of the sessions were posted in the break room and volunteers indicated their anticipated attendance. After attending the sessions, nurses were expected to use the Patient Sitter Assessment Tool in practice for one month. They were then asked to complete an evaluation survey which would take less than 10 minutes of time to complete. Evaluation surveys were located in a manila envelope in the nurses' break room with instructions to complete and return to a locked drop box to ensure anonymity.

### **Intervention**

Participants attended two 30 minute educational interventions, on their own time, within a three week period. Beverages and dessert were offered at the educational sessions. The content outline and objectives for the educational sessions is outlined in Table 1.

Table 1

*Educational intervention content outline and objectives*

<b>Class Content</b>	<b>Objectives</b>
<u>Class One</u>	
Prevalence of delirium and contributing factors	Participants will be able to verbally list three risk factors for delirium.
Difficult to manage behaviors and how they are associated with delirium	Participants will describe the link between delirium and difficult to manage behaviors.
Using a standardized assessment to improve outcomes	Participants will be able to verbally explain how continuity in assessment can impact patient safety.
<u>Class Two</u>	
Review of the Confusion Assessment Method (CAM) (short version screening) and how to use	Participants will demonstrate correct use of the CAM short version
Demonstration of correct use of the Patient Sitter Assessment Tool.	Participants will demonstrate correct use of The Patient Sitter Assessment Tool.

Class 1 provided the background related to delirium and difficult behaviors, while Class 2 focused on correctly using the Tool, which included the CAM. Nurses were instructed to first complete Part I of the Assessment, which was designed to identify contributing factors to a change in a patient's baseline. If the assessment was positive for "cardinal signs", nurses were instructed to follow the Rapid Response Policy and activate the rapid response team. Cardinal signs

included: any staff member (nurse, physical therapist, respiratory therapist, physician) 'worried' about the patients' status; acute change in heart rate  $< 40$  or  $> 130$  beats per minute; acute change in systolic blood pressure  $< 90$  mmHg; acute change in respiratory rate  $< 8$  or  $> 28$  per minute; acute change in oxygen saturation  $< 90$  percent despite O<sub>2</sub>; acute change in consciousness; and acute change in urinary output to  $< 50$  ml in 4 hours. ("Establish a rapid," n.d.). Following completion of Part I, and intervening as indicated, the nurses were instructed to then complete Part II, the short version of the CAM. If the CAM was suggestive of delirium, nurses were instructed to report the results of Part I and II of the tool to the LIP, and to request a neurologic/psychiatric consult.

### **Evaluation of the Patient Sitter Assessment Tool**

All participants completed the two educational sessions and were considered for inclusion in the measurement process. After completion of the educational sessions, hardcopies of the Patient Sitter Assessment Tool were given to these participants to use for one month in practice. The paper copies of the completed tool were returned after use by RNs placing them in a designated, locked box in the nurses' break room. The primary investigator removed any returned copies daily, Monday through Friday, and stored them in the locked file cabinet along with, but separate from, the consent forms. The only data on these forms was assessment data as requested on the form. No unique HIPAA (Health Insurance Portability and Accountability Act) identifiers were requested or collected. The returned tools were reviewed by this investigator to determine if they are complete or incomplete. This provided additional information on if the tool was completed appropriately.

A flyer was posted in the break room near the completion of the one month trial period to notify participants that the evaluation surveys were available. An investigator designed



evaluation survey (Appendix D) was available in a manila envelope in the nurses' break room approximately one month after the sessions were completed along with a copy of the informational letter of consent (Appendix E). Instructions to return the completed surveys to a locked box located in the break room were included. Responses did not contain any personal identification information so anonymity and confidentiality were maintained. The evaluation survey was developed specifically for this project to determine ease of use, nurse satisfaction, and utility of the tool. This feedback was obtained using a Likert scale and one dichotomous (Yes/No) response, along with the opportunity for suggesting improvements to the tool.

Next, results will be presented.

### Results

The sample included 12 Registered Nurses (RNs) employed on one unit at the PVAMC who volunteered to participate. The nurses' ages ranged from 22 to 56 (mean age = 45; mode = 48), and they had from 1 to 32 years of nursing experience (mean = 15 years). Out of the 12 participants, 11 (92 %) evaluation surveys indicated actual use of the tool.

Nurses (n = 11) who used the tool completed a survey to evaluate ease of use and utility.

Responses to those survey questions are illustrated in Table 2.

**Table 2**

*Nurses' responses to survey questions evaluating ease of use and utility of the Patient Sitter Assessment tool*

	<b>Strongly agree</b>	<b>Agree</b>	<b>Neither Agree nor Disagree</b>	<b>Disagree</b>	<b>Strongly disagree</b>	<b>Response Average</b>
	<b>(5)</b>	<b>(4)</b>	<b>(3)</b>	<b>(2)</b>	<b>(1)</b>	
The Patient Sitter Assessment Tool was easy to use.	73% (8)	27% (3)	0% (0)	0% (0)	0% (0)	4.72
The Patient Sitter Assessment Tool improved my ability to detect delirium.	55% (6)	45% (5)	0% (0)	0% (0)	0% (0)	4.54
The Patient Sitter Assessment Tool improved my ability to detect contributing factors to a change in patient's baseline.	64% (7)	36% (4)	0% (0)	0% (0)	0% (0)	4.63
I found it a useful tool to assess patients prior to initiating a sitter.	55% (6)	45% (5)	0% (0)	0% (0)	0% (0)	4.54
<b>Total Respondents</b>						<b>11</b>

As can be seen, all of the respondents (n=11;100%) agreed or strongly agreed that the Patient Sitter Assessment tool was easy to use and provided a guide to refine their assessment of patients requiring a sitter in the detection of delirium and underlying factors that contributed to a change in a patient's cognition.

Respondents were also asked to evaluate their satisfaction with the tool, as illustrated in Table 3.

**Table 3**

*Nurses' responses to survey questions evaluating satisfaction with the Patient Sitter Assessment Tool*

	<b>Very Satisfied</b>	<b>Satisfied</b>	<b>Neither Satisfied nor Unsatisfied</b>	<b>Unsatisfied</b>	<b>Strongly disagree</b>	<b>Response Average</b>
	<b>(5)</b>	<b>(4)</b>	<b>(3)</b>	<b>(2)</b>	<b>(1)</b>	
Overall, how satisfied were you with the Patient Sitter Assessment Tool?	45% (5)	<b>55% (6)</b>	0% (0)	0% (0)	0% (0)	<b>4.45</b>
<b>Total Respondents</b>						<b>11</b>

All respondents (n=11; 100%) indicated overall they were satisfied or very satisfied with the tool. At the conclusion of the evaluation survey, participants were asked to provide any suggestions that could improve the tool. Of the 12 participants, seven (58%) provided no suggestion for improvements to the tool. Five (42%) provided suggestions, 80 % of which requested more education on delirium.

In addition to the evaluation survey, participants were asked to return any patient sitter assessment tools completed to the designated locked box in the nurses' break room. In analyzing the returned forms, there were inconsistencies in how the forms were completed. Of 11 forms returned, seven were complete; four lacked all requested data suggesting that follow up was indicated.

Next, summary and conclusions will be presented.

### **Summary and Conclusions**

Patient safety is the highest priority in healthcare today. A report released by the IOM (1999) provided compelling data that patient injury and death were related to preventable hospital errors (Kohn et al., 2000). In particular, the IOM examined processes rather than individual practice within the system as major contributors to error. It is critical that processes are in place, reviewed, and improved according to the latest evidence in order to provide healthcare systems with the tools clinicians need to maintain safety. TJC (2010a) addresses processes and protocols of highest priority within the NPSGs, which are updated annually according to the latest evidence. Since 2005, patient harm resulting from falls continues to be included in the NPSGs as an ongoing focus.

Despite improvements to screen patients for fall risk, this preventable event continues to plague the hospitalized patient population, negatively impacting morbidity and mortality, and leading to increased LOS and healthcare costs (CMS, 2008; Lakatos et al., 2009). Delirium, an emergent situation requiring immediate intervention (Inouye, 2006), has been identified as one of the contributing factors (BGS, 2006), and the literature indicates that delirium is under recognized by bedside clinicians, thus supporting a uniform method of detection (Farley & McLafferty, 2007; Law, 2008). Sitters are often used to manage the difficult behaviors that can be associated with delirium, but evidence to support that this intervention prevents patient injury, especially related to falls, is lacking (Dahlke & Phinney, 2008; Tzeng et al., 2008). The evidence identifies specific risk factors that have potential to impact a patient's cognition (Currie, 2008; Oliver et al., 2004; VHA NCPS, 2009), and implementing a consistent approach for assessing these factors can minimize exclusion of pertinent information (Lakatos et al., 2009).

The development of this project stemmed from identified inconsistencies in how nursing staff assessed patients with a change in cognition who potentially would require a sitter for safety. A comprehensive literature search provided the evidence to support the development of the Patient Sitter Assessment tool as a means to provide a systematic approach for nursing assessment. The purpose of this project was to determine the ease of use, nurse satisfaction, and utility of the Patient Sitter Assessment Tool. Part I was developed based on the literature that identified key assessments that nurses can conduct to evaluate a change in a patient's baseline (Aguirre, 2010). Timely discovery and vigorous treatment of health problems including but not limited to infections, under treatment of pain, recent changes in medication, and electrolyte imbalances are critical. The CAM was chosen as the screening method to be included for Part II of the tool based on its proven reliability, validity, and ease of use by non-psychiatrically trained bedside clinicians (Inouye et al., 1990; Milisen et al., 2005).

Educational sessions were provided that focused on the evidence derived from the literature in development of the tool. Participants expressed that the hyperactive form of delirium was the one that they were most familiar with. During these sessions, and from evaluation surveys, most participants expressed an interest in obtaining more knowledge that connected the contributing factors to a change in baseline and cognitive status. Participants favorably evaluated a comprehensive, standardized approach to assessing a patient with a change in baseline prior to a sitter request.

Limitations to this project included that the writer is the nurse educator for the unit where participants were recruited. Due to this association, staff may have felt compelled to participate. However, every attempt was made to assure the voluntary nature of the project and to maintain protection of the participants' responses. Another limitation was the small number (n=12) of

participants. It was also difficult for the staff to find time to attend the 30 minute educational sessions. Provisions were made to accommodate the schedules of the staff who expressed interest in participating. Limited demographic data were collected, so it is not possible to examine whether other factors such as ethnicity would impact responses.

During the process of conducting this project, it was clear that more education was needed to assist the bedside nurses in discriminating the causes of change in a patient's baseline. The staff from the inception of this process exhibited an eagerness to obtain more knowledge and genuine interest in the transition from evidence to practice. The demonstrated ownership of the nursing staff in this change process can be expected to result in improved care. Involving the staff in the evaluation can provide further valuable information about how the change impacts the daily workflow and if outcomes reflect what the tool was intended for.

Inconsistencies were noted in the use and completeness of the form. These inconsistencies warrant follow up with additional clarification on the data needed for a comprehensive assessment. Ultimately if the staff is not satisfied with integration of a new process, it can fail. Ongoing support, education, and identification of barriers are needed to sustain change.

In conclusion, the literature reviewed provided evidence for development of the Patient Sitter Assessment tool, and supported that a systematic approach can decrease errors of omission and potentially improve the delivery of care, especially in fast paced medical environments. Providing the staff with an evidence based tool to assess patients prior to initiating a sitter can assist them to identify and communicate a patient's current status to the LIP and healthcare team, allowing for the earliest possible interventions.



### **Recommendations and Implications for Advanced Practice Nursing**

The need for safe, quality healthcare is the highest priority and is expected by the consumer. This performance improvement project demonstrated how a practice question can lead to an evidence based product and potentially impact patient safety and improved outcomes. Advanced practice nurses (APNs) are in a unique position to enable other members of the healthcare team to visualize and implement practice changes through evidence and research, leading to patient care that is efficient, effective, and safe. APNs include Clinical Nurse Specialists (CNSs), Certified Nurse-Midwives (CNMs), Nurse Practitioners (NPs), and Certified Registered Nurse Anesthetist (CRNAs). The CNS expert is specifically trained to provide education, consultation, leadership, coaching, and guidance, either indirectly or directly, within the interdisciplinary healthcare team.

The CNS is directly responsible for positively impacting patient outcomes through implementation and evaluation of evidence based and best practice change, using innovative technologies and teamwork. Designing and implementing quality, cost effective care places the CNS in a pivotal role at the table in the current healthcare system. This project clearly illustrates the potential for the CNS role to positively impact patient care. The CNS is an educator, researcher, mentor, and change agent, with the main goal of improving outcomes. Ongoing implementation and evaluation of processes of care delivery, based on research and evidence, is where the CNS leads. Data derived from the CNSs' work will provide the evidence needed to drive and support change.

Use of sitters to decrease patient injury remains an ongoing practice, but little evidence exists in the literature that this intervention is effective. Further research is needed related to delirium and falls prevention overall and in particular related to strategies to prevent falls in at



risk acute care patients with delirium. Examining the effectiveness of systematic approaches based on evidence, as were implemented in this project, are indicated.

The CNS is uniquely prepared to impact health care through the three spheres of influence: patient, nursing and nursing practice, and systems/organizations. This synergistic vision assists in development of policies and procedures, while being an advocate for patients, their families, and the nursing staff within the system. This multifaceted role influences and drives changes at the unit, department, and organizational levels and beyond. The CNS is positioned to contribute to state and federal regulatory measures that impact the culture of safety in healthcare. CNSs, as members of APN organizations, need to actively petition for positions on boards at the state and federal level that have the potential to influence healthcare policy. CNSs need to be at the forefront, advocating policy changes that continue to support and expand efforts to assure safe, quality, and cost effective care.

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## Patient Sitter Assessment Tool

Appendix A

### Part I

- ☐ Pulse oximetry
- ☐ Vital signs
- ☐ Current Intake & Output (last 24hr)
- ☐ Last Bowel Movement
- ☐ Recent changes in medications (additions or deletions)
- ☐ Under treatment for pain
- ☐ Acute withdrawal alcohol/tobacco/other
- ☐ Diagnostic and laboratory values
- ☐ Other \_\_\_\_\_? recent infection

Report above assessment results to the LIP prior to initiating a sitter

**\*ANY ACUTE CHANGES THAT ARE CARDINAL SIGNS INSTITUTE RAPID RESPONSE TEAM**

### Part II

#### CONFUSION ASSESSMENT METHOD (CAM) SHORTENED VERSION WORKSHEET

#### I. ACUTE ONSET AND FLUCTUATING COURSE

- a) Is there evidence of an acute change in mental status from the patient's baseline? No \_\_\_\_\_
- b) Did the (abnormal) behavior fluctuate during the day, that is tend to come and go or increase and decrease in severity? No \_\_\_\_\_

#### II. INATTENTION

Did the patient have difficulty focusing attention, for example, being easily distractible or having difficulty keeping track of what was being said? No \_\_\_\_\_

#### III. DISORGANIZED THINKING

Was the patient's thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject? No \_\_\_\_\_

#### IV. ALTERED LEVEL OF CONSCIOUSNESS

Overall, how would you rate the patient's level of consciousness?

-- Alert (normal)

- Vigilant (hyperalert)
- Lethargic (drowsy, easily aroused)
- Stupor (difficult to arouse)
- Coma (unarousable)

Do any checks appear in this box?

No \_\_\_\_\_

#### BOX 1

Yes \_\_\_\_\_

Yes \_\_\_\_\_

Yes \_\_\_\_\_

#### BOX 2

Yes \_\_\_\_\_

Yes \_\_\_\_\_

**If all items in Box 1 are checked and at least one item in Box 2 is checked a diagnosis of delirium is suggested. Notify LIP for neuro/psych consult.**

Adapted from Inouye SK et al, Clarifying Confusion: The Confusion Assessment Method. A New Method for Detection of Delirium. Ann Intern Med. 1990; 113:941-8.

## Recruitment Flyer

## Appendix B

My name is Tamara DeSousa, a Master's student in nursing at RIC. I would like to invite you to participate in a project to evaluate a Patient Sitter Assessment Tool designed to improve the process of assessment of patients prior to initiating a sitter. You may participate if you are a Registered Nurse staff from 5B. Please do not participate if you are a Registered Nurse that is floating to 5B temporarily or an intermittent (per diem) nurse.

As a participant, you will be asked to attend two 30 minute educational presentations on your break time within a two week period of time. Beverages and dessert will be offered at the educational sessions. Content of the first session will include evidence that supports development of this assessment tool, prevalence of delirium and how it contributes to difficult to manage behaviors leading to sitter request. The second session will review a delirium assessment instrument included in the Patient Sitter Assessment Tool followed by appropriate application. After these sessions you will be provided with a hardcopy of the Patient Sitter Assessment Tool to use in practice for one month. At the conclusion of the month an evaluation survey will be provided in a yellow manila in the nurses' break room with instructions to return to a locked box when completed.

Your participation is voluntary and has no positive or negative impact on your position. Your responses to the evaluation survey will be confidential and anonymous. The cost involved is your time needed to fulfill the requirements for this pilot. Feedback obtained from the evaluation will be used to improve the Patient Sitter Assessment Tool which may be included in the Patient Sitter Policy. Detection of delirium and factors that contribute to changes in cognition in our patients may lead to improved patient safety and improved outcomes.

If you would like to participate in this research study please e-mail me at [tamara.desousa@va.gov](mailto:tamara.desousa@va.gov).

Do you have any questions now? If you have questions later, please contact me at 401-273-7100 ext. 3588 or you may contact my advisor, Dr. C. Padula, at [cpadula@ric.edu](mailto:cpadula@ric.edu).

Thank you

Tammy

## CONSENT DOCUMENT

### Rhode Island College

#### Evaluation of the Patient Sitter Assessment Tool

You are being asked to participate in a research study to evaluate an Assessment Tool prior to initiating a patient sitter. You were selected as a possible participant because you volunteered and met the criteria for the project. Please read this form and ask any questions that you may have before agreeing to be in the research. Tamara L. DeSousa at Rhode Island College is conducting this study to fulfill a requirement for a graduate Master's of Science in Nursing degree.

#### Background Information

The purpose of this research is to determine the ease of use, nurse satisfaction and utility of a Patient Sitter Assessment Tool.

#### Procedures

If you agree to be a participant in this research, you will be asked to do the following things:

- Attend two 30" educational sessions on your lunch break on: evidence that supports the development of the Patient Sitter Assessment Tool, and proper application of the tool.
- Apply the Patient Sitter Assessment Tool in bedside practice for one month after completing the educational sessions.
- Complete a survey at the conclusion of one month of application in practice of the Patient Sitter Assessment Tool.

#### Voluntary Participation

Your participation is completely voluntary. If you choose not to participate in this research, there will be no negative consequences to your employment. Also, you can change your mind about participating at any time with no negative consequences. Choosing not to participate or changing your mind will not affect your relationship or standing with the Providence VA Medical Center.

#### Risks and Benefits to Being in the Study

There are no foreseeable risks of participating in this research other than the time to participate in the educational sessions and complete the tool is identified.

There are no direct benefits to you, although you may benefit by better recognition of delirium and contributory factors to delirium.

\_\_\_\_\_ Initial here to indicate that you have read and understood this page.

**Confidentiality**

The records of this research will be kept private. In any sort of report that might be published, the researcher will not include any information that will make it possible to identify you.

Research records will be kept in a secured file, and access will be limited to the researcher, the Rhode Island College review board responsible for protecting human participants, and regulatory agencies. All data will be kept for a minimum of three years, after which it will be destroyed.

**Contacts and Questions**

The researcher conducting this study is Tamara L. DeSousa. You may ask any questions you have now. If you have any questions later, you may contact her at [tamara.desousa@va.gov](mailto:tamara.desousa@va.gov), 401-273-7100 ext 3588 or the faculty advisor Cynthia Padula PhD at [cpadula@ric.edu](mailto:cpadula@ric.edu).

If the researcher cannot be reached, or if you would like to talk to someone other than the researcher about (1) your rights as a research participant, (2) research-related injuries or problems, or (3) other issues/concerns you have about your participation in this study, please contact the Chair of the Institutional Review Board at [IRB@ric.edu](mailto:IRB@ric.edu), or by phone (401-456-8228), or by writing, Chair, IRB; c/o Office of Research and Grants Administration; Roberts Hall; Rhode Island College; 600 Mount Pleasant Avenue; Providence.

You will be given a copy of this form for your records.

**Statement of Consent**

I have read and understand the above information, and I agree to participate in this study. I understand that my participation is voluntary and can be withdrawn at any time with no negative consequences. I have received answers to the questions I asked, or I will contact the researcher with any future questions that arise. I am at least 18 years of age.

Print Name of Participant: \_\_\_\_\_

Signature of Participant: \_\_\_\_\_ Date: \_\_\_\_\_

## Evaluation of the Patient Sitter Assessment Tool

## Appendix D

I am very interested in gaining your feedback regarding the Patient Sitter Assessment Tool.

Please complete this form and return it to the designated box in the break room.

Please Note: This is a confidential survey and no student names are recorded or known. Thanks.

1. Please indicate the level of agreement that most accurately reflects your opinion about this tool.

	Strongly agree	Agree	Neither Agree nor disagree	Disagree	Strongly disagree
The Patient Sitter Assessment tool was easy to use:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Patient Sitter Assessment Tool improved my ability to detect delirium:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Patient Sitter Assessment Tool improved my ability to detect contributing factors to a change in patients' baseline:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I found it a useful tool to assess patients prior to initiating a sitter:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Overall, how satisfied were you with The Patient Sitter Assessment Tool? Please circle

1 Very Satisfied      2 Satisfied      3 Neither satisfied nor unsatisfied  
4 Unsatisfied      5 Very Unsatisfied

3. Do you have any suggestions that you think could improve The Patient Sitter Assessment Tool?

Yes ☐

No ☐ If yes please describe:



**Informational Consent for Evaluation Survey****Appendix E**

You are being asked to participate in a research study to evaluate an Assessment Tool prior to initiating a patient sitter. You were selected as a possible participant because you volunteered and met the criteria for the project. Tamara L. DeSousa at Rhode Island College is conducting this study to fulfill a requirement for a graduate Master's of Science in Nursing degree. The purpose of this research is to determine the ease of use, nurse satisfaction and utility of a Patient Sitter Assessment Tool.

After completion of the following:

- Attend two 30" educational sessions on your lunch break on: evidence that supports the development of the Patient Sitter Assessment Tool, and proper application of the tool.
- Apply the Patient Sitter Assessment Tool in bedside practice for one month after completing the educational sessions.
- Complete a survey at the conclusion of one month of application in practice of the Patient Sitter Assessment Tool.

Your completing this survey will probably take 10 minutes of your time. There are three sections I would like you to answer. Once you have completed the survey please place it in the locked box in the break room.

There are no questions that should cause you discomfort. Your taking part in this research survey is completely voluntary. If you do not want to complete the survey you are free not to choose to fill out the survey.

Your completion of this survey may not benefit you personally. I am hoping these completed surveys will provide information to help provide better care for all our patients.

The survey from this project will be kept confidential. None of the information you provide will have your name or any number on it that will identify you personally.

The researcher conducting this study is Tamara L. DeSousa. You may ask any questions you have now. If you have any questions later, you may contact her at [tamara.desousa@va.gov](mailto:tamara.desousa@va.gov), 401-273-7100 ext 3588 or the faculty advisor Cynthia Padula PhD at [cpadula@ric.edu](mailto:cpadula@ric.edu). If the researcher cannot be reached, or if you would like to talk to someone other than the researcher about (1) your rights as a research participant, (2) research-related injuries or problems, or (3) other issues/concerns you have about your participation in this study, please contact the Chair of the Institutional Review Board at [IRB@ric.edu](mailto:IRB@ric.edu), or by phone (401-456-8228), or by writing, Chair, IRB; c/o Office of Research and Grants Administration; Roberts Hall; Rhode Island College; 600 Mount Pleasant Avenue; Providence.

Thank you very much for your time!

Tamara L. DeSousa

