PREVENTING FALLS IN ACUTE CARE SETTING. FALLSAVER: A NEW SOLUTION TO AN OLD PROBLEM.

By

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PREVENTING FALLS IN ACUTE CARE SETTING. FALLSAVER: A NEW SOLUTION TO AN OLD PROBLEM.

Abstract
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Patient falls and fall rates are among the ten nursing-sensitive quality indicators and a high priority for nursing administrators, nurses, patients and their families due to issues related to average cost per single fall, reimbursement for treatments, prolonged hospitalization, increased morbidity and mortality, litigation settlements, as well as physical, psychological stress and reduction in overall quality of life for patients. While current nursing literature offers only few examples of comprehensive fall prevention programs, the Joint Commission mandates acute care hospitals to develop and maintain effective multidisciplinary programs with well documented results in fall rate reduction. Together with poor methodology, lack of research rigor, and multiplicity of ineffective risk assessment tools, the lack of unified operational definition of falls in the literature contributes to confusion in the interpretation of data and outcome variables in the currently available studies. Technological innovations, such as the FallSaver System (a wireless, discrete, non-restraint device), will assist nurses in the development of comprehensive and evidence-based multi-component fall prevention programs. Increased awareness, development and testing of assessment tools appropriate for acute care, partnership between all stakeholders involved in patient care, will create a safe environment of high quality, cost-effective and efficient patient care, as well as assure the economic sustainability of the individual health care organization.
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I. Importance of the issue of patient falls.

Patient falls and fall rates are among the ten nursing-sensitive quality indicators recommended to be collected and reported by hospitals across United States by the American Nurses Association (ANA) as an articulation of the impact of the profession on safe and high quality patient care (http://www.nursingworld.org/MainMenuCategories/ThePracticeofProfessionalNursing/PatientSafetyQuality/NDNQI/Research/QIforAcuteCareSettings.aspx). By emphasizing the role of consumers’ and providers’ involvement in improving clinical outcomes for patients, achieving efficient and effective care through quality measurement and reporting, the National Quality Forum (NQF), a private non-for-profit organization, directs great attention to nursing-sensitive indicators, among which are falls prevalence and falls with injuries (http://www.qualityforum.org/nursing). Another organization involved in patient care issues, the Joint Commission, made reducing the risk of harm resulting from falls together with implementation and evaluation of fall reduction programs, one of its goals for patient safety in critical access hospitals (http://www.jointcommission.org/PatientSafety/NationalPatientSafetyGoals/08_cah_npsg_s.htm). Previously exempt from some of the national safety issues due to their small size, critical care facilities now have to make patient safety and quality of patient care a top priority. Therefore patient falls do not only reflect the quality of care received in any hospital setting, but also the safety of the environment in which care is delivered.

While the overall number of patient falls is a concern regarding the quality of care delivered, on the financial side, the cost associated with them is becoming an increasing burden on the already heavily taxed healthcare system. In 2007 Medicare announced that
the cost of treatment related to injuries from preventable falls in hospitals will no longer be covered (http://www.cms.hhs.gov/default.asp). With an average cost between $16,030 and $24,330 per single fall (Titler et al, 2006, Tinetti, M.E., Gordon, C., Sogolow, E., Lapin, P., & Bradley, E.H., 2006), this will become an additional finance charge absorbed by the health care organizations. Although the above figures may not seem significant when a comparison to the total cost of a patient’s hospitalization is drawn, the lack of studies on the real cost related to hospital falls prevents hospital administrators and providers from adequate assessment of the magnitude of the issue. With this change hospitals will have to design a tracking system to reflect different charges of interventions associated with post-fall care such as: nursing and medical interventions, diagnostic and laboratory tests, extra hospital days, and extended discharge accommodations. And if the cost of falls was not a high priority for most hospitals prior to 2007, the new financial environment of health care in USA mandates a dramatic reduction and a detailed review of all incurred expenses in order to stay competitive in a market place of reduced reimbursements and a constantly increasing cost of providing care. As Titler et al (2005) suggest medical, nursing, pharmacological interventions, as well as unique unit specifications including increased nursing to patient staffing ratios, all of which are usually unrecognized but related to falls can increase incrementally the cost of the total stay and pose a threat to its cost-effectiveness. Bates, Pruess, Souney, and Platt (1995) found that patients who fall have a 61% increase in hospital length of stay and 71% increase of total charges when compared to non-fallers. These figures do not include cost of litigation and insurance settlements associated with the falls.
In addition, falls create physical and emotional stress on patients with reported rates of falls varying between different countries in the range of 2% to 17% and related injuries in 15% to 50% of affected patients (Schwendimann, Buehler, De Geest and Milisen, 2006). In 1994 the direct cost of care (the amount paid by patients and insurance companies) related to fall injuries only was $20.2 billion and it is projected that by the year 2020 it will reach $34.2 billion (McCarter-Bayer, Bayer and Hall, 2005).

Approximately 30% of inpatient falls result in moderate to severe injuries which will reduce further the individual’s mobility and independence (Liang, 2002). Research assertains that 90% of hip fractures are the result of falls (Vassalo, Vignaraja, Sharma, Briggs, and Allen, 2004) and falls have continued to be a leading cause of mortality in older adults in the United States (CDC, 2004). As Americans age the number of patients seeking health care services will increase. Since age of 60 or older and co-morbidities are major determinants of falls (Lane, 1999, Williams et al, 2007), health care providers can only expect a corresponding increase in falls and costs associated with them. In addition to legal liability and litigation cost, falls have dramatic psychological consequences for the patient. They precipitate anxiety and fear of falling again or “ptophobia” (Lach, 2005), which leads to voluntarily imposed restrictions on activity and further muscle weakness, therefore predisposing elderly for gait disturbances and more repeated falls, thus reducing their overall quality of life. Studies confirm that recurrent falls lead to loss of confidence in performing activities of daily living, poor mobility, social isolation, increased hospitalizations, early admission to nursing homes, and increased mortality when compared to other patients (Ignatavicius, 2000, Li, Fisher, Harmer, McCauley and Wilson, 2003, and Oliver, Daly, Martin, & McMurdo, 2004).
The socio-economic and psychological consequences of falls to patients, the financials of the current health environment, as well as the mandate to deliver simultaneously high quality and cost-effective care, necessitate the need for integration of current research knowledge about falls and fall prevention programs with novel technological approaches and high level of involvement by hospital administrators and direct care providers. Introducing technological fall prevention strategies, such as the FallSaver System (www.fallsaver.net), into a well designed and comprehensive multidisciplinary program, may help hospitals reduce litigations, overall fall-related costs, improve customer satisfaction and competitiveness in the market place.

II. Review of literature

Evidence of fall prevention in the community and long-term care has been well documented in nursing literature, while similar studies in acute care setting have been scant (Coussement et al, 2008, Curie, 2006, Krauss et al, 2007, Hitcho et al, 2004, Oliver, Daly, Martin, & McMurdo, 2004). The literature review was conducted using the following methodology: a computerized search of multiple data bases (Medline, Ovid, and ProQuest) with restrictions placed on full text and peer reviewed articles. Years of publications included the period of 1993 to 2008, resulting in a total of 127 articles. Searches were limited to English and German languages in attempt to explore whether other countries have included technological innovations into their fall prevention programs. Search terms were: acute care, patient falls, injury, hospitals, acute care, fall prevention programs. Studies related to interventions in community-based programs, home health care or long-term care facilities, as well as focused only on particular
populations (such as cancer or gero-psychiatric patients) were eliminated from the list. Exception was made for an unpublished study regarding the use of a specific Clinical Decision Support System- the FallSaver (Clifton, G.D., Shonkwiler, J.S., Kelly, K.E., 2007). The remaining 56 articles, as well as their reference lists, were examined for relevance and additional publications not included in the original results. In addition five systematic reviews and meta-analyses of literature on fall preventions were also included: Coussement et al (2008), Curie (2006), Evans et al (1998), Gillespie et al (2003), and Oliver et al(2004).

III. Current limitations of available studies

Although most of the articles reported on different components of fall prevention programs, only a few studies mentioned use of alternative patient management strategies such as bed alarms, arm bracelets, or the FallSaver motion detection device (Clifton et al, 2007, Tideiksaar et al, 1993, Mayo, Glotney, & Levy, 1994 as cited in Gillespie et al, 2003, Evans et al, 1998). Gillespie et al (2003) cited the conclusions of a study by Lauritzen, Petersen, & Lund (1993) which reported that while hip protectors were effective in reducing injuries, the financial constrains of their application to each patient and compliance with their application reduce their usability in acute care setting. The limited availability of research on protective or monitoring devices creates a unique challenge to clinicians who are interested in creating a comprehensive fall prevention program.

Based on the strength of methodological evidence and analysis of data, the conclusions of one meta-review confirmed that overall “poor research design and
incomplete reporting” of the studies deem the majority of them expert opinions with limited usefulness (Evans et al, 1998). The other systematic reviews also acknowledged assessment of quality as category four or descriptive studies with minimal report of evidence of interventions (Gillespie et al, 2003, Coussement et al, 2008, Currie, 2006).

The majority of fall prevention reports focused on staff education in regards to preventing patient falls and development of such educational programs. Only one recent study attempted to measure the financial aspect of falls and injuries related to them in a hospital setting (Titler et al, 2005). Krauss et al (2007) and Oliver et al (2004) ascertain the inability to generalize findings from the studies in the community and long-term care environment due to the difference in patients’ characteristics. Other limitations included poor control over the quality of data reported, lack of comprehensive analysis of causes for patient falls, limited time frame of the studies, a small sample population or lack of representativeness in the sample, and lack of agreement on a universal definition of falls (Evans et al, 1998, Hitcho et al, 2004, Sulla, & McMyler, 2006).

IV. Definition of falls

The definition of falls was addressed only in two studies (McCarter-Bayer, 2005; Currie, 2006), which illuminates the lack agreement on a definition of a fall and creates difficulties for researches in comparing different study methodologies and their results. The inconsistencies in the definitions can lead to varying interpretation of the data and outcome variables, therefore making it also difficult to conduct large scale reviews (Currie, 2006, McCarter-Bayer, et al, 2005) Three common approaches to a definition were identified by the current author in the process of the literature review: based on the
etiology of falls (Hitcho et al 2004, Krauss et al, 2005), on the type of the fall event – accidental, anticipated and unanticipated (Morse, 1997, Morse 2002), or on the injuries (result of the fall) the patient suffers (the International Classification of Disease Manifestations (or ICD-9-CM, Currie, 2006).

Hitcho et al (2004) and Krauss et al (2005) emphasize the etiology of falls as the most important determinant in the selection of interventions related to their prevention. Some authors use intrinsic and extrinsic as descriptors for their etiological methodology, adding multiple subgroups of factors under each of these headings (McCarter-Bayer et al, 2005, Akyol, 2007, McFarlane-Kolb, 2004, Mitchell, A., & Jones, N., 1995, Mosley et al, 1998). The multitude of factors documented in the literature requires a multidimensional approach in which normal physiological changes of aging, medication use, pathophysiology, new developments in the course of patients’ chronic diseases, as well as environmental factors to be built into a comprehensive fall prevention program in order to assure its success and widespread adoption in clinical practice.

Currie’s (2006) research was identified as the only example of a definition of falls in a context of medical errors. Since litigation is a serious concern in acute care, focusing on the legal consequences of falls in relationship to one’s personal liability as a provider (error of omission, error of omission, latent error, or monitoring error) can help nurses get involved in the development of strategies against malpractice suits, thus supporting practice-based organizational processes and unit specific interventions. When patient care is organized with consideration of clients’ specific characteristics and nurses engage in the development of a safe patient environment combined with evidence-based practice,
the results can be not only higher satisfaction for both patients and caregivers, but also a
dramatic reduction of cost for the above care per patient stay.

ANA (2005) offers a broad definition of falls as any “unplanned decent to the
floor...as a result from physiological or environmental reasons”(as cited in Currie, 2006).
Although it appears to be broad and all-inclusive, it also limits the scope of interventions
to nursing science only. To be successful, prevention programs should include all
disciplines involved in the patient care – medicine, pharmacy, physical and occupational
therapy, nursing. It could be argued that the etiological approach to defining falls may be
most appropriate for the acute care setting considering the multidisciplinary dimensions
of patient care. Moreover researchers (Krauss et al, 2005, Sulla & McMyler, 2007,
Browne et al, 2004, McFarlane-Kolb, 2004) emphasize that the most likely reduction of
falls will follow from targeting several risk factors simultaneously, therefore placing falls
etiology in the forefront of the search for a common definition.

Boufous & Finch (2005) postulate that a consensus on the case identification of
hospital falls and a development of a clear operational fall definition, will lead to the
reduction of current overestimation of the true hospitalized falls incident rates.
Consequently, hospitals will able to develop widely accepted benchmarks and indicators
for fall reporting and therefore timely adjust financial recourses and modify fall
prevention programs according to the specifics of client populations.

V. Summary of existing findings on Fall Prevention Programs

A Fall Prevention Program should include three distinct components: assessment with
appropriate tools for identification of patients at risk, nursing and multidisciplinary
interventions complemented by assistive technological systems (bed alarms, FallSaver, direct viewing technology), and an interactive (user-inclusive) design for timely system-wide monitoring of results, allowing for immediate adjustments in needed interventions.

Multiple studies reported staff education regarding falls as the most important factor in their reduction (Krauss et al, 2007, Mosley et al, 1998, Morse, 2002, Williams et al, 2007, Wilson, 1998). While all reviewed studies recognized the importance of assessment at admission and continuous update of patient risk factors for falling, only few described a well-structured prevention program. Some authors noted that nurses already have been following protocols or initiating actions such as: placing patients at risk near the nursing station, close visual observations, installing bed alarms, or placing signs at the patient’s door etc, or intervening in an ad hoc manner without designating actions as elements of an organized fall prevention program (King et al, 2007). Commonly a program constituted of a list of recommendations adopted by a particular organization or a summary of such from nursing literature reviews (Akyol, 2007, Ignatavicious, 2000, Schwendimann et al, 2006, Williams et al, 2007, Wilson, 1998), a weakness emphasized also in the Joanna Briggs Institute report (Evans et al, 1998).

Sulla & McMyler (2006) presented a comprehensive fall prevention program at the Mayo Clinic, which included five components: (1) risk assessment and screening; (2) communication; (3) creating a culture of delegation; (4) education and (5) facility and environment design. Mc-Farlane-Kolb (2004) suggests that fall prevention initiatives should be based on three components: (1) fall risk screening; (2) multi-targeted strategies; and (3) staff training. The above two were selected as the closest identification of a structured fall prevention program in the author’s view.
V (A) Fall Assessment Tools

Assessment tools most commonly cited in the studies were: STRATIFY (Oliver et al, 1997), Downton (Downton, 1993), Tullamore (Cunnington et al, 2003), Tinetti (Tinneti et al, 1986), and the Morse scale (Morse, 1989). Vassalo et al (2005) compared the effectiveness of the first four of them concurrently in the same clinical environment (acute medical wards) and found significant difference in the performance and complexity between them. While ease of use is an important factor in the application of a specific tool, characteristics such as: sensitivity (total number of fallers correctly identified as high risk); specificity (patients identified as low risk fallers who actually do not fall); positive and negative predictive values (high risk patients who fell and low-risk patients who did not fall) accuracy needs to be taken into account when selecting the assessment scale. Requirements, such as performing postural blood pressure on all patients (Tinetti) may be not feasible in all acute settings. Overall the predictive accuracy of most scales has been reported low (Evans et al, 1998, Gillespie, et al, 2003, Oliver et al, 2004, Vassalo, 2005), and an ideal tool with high sensitivity and specificity is difficult to develop. Some of the above scales were originally developed for long-term care (like the Morse Scale), and later adopted and modified for the needs of acute care patients. While Morse (1997) warns that the scale needs to be calibrated to the specifics of each individual unit in acute care settings, there is no evidence of calibration in the nursing literature.

While there is not a single superior instrument documented currently, based on the conflicting results from multiple studies an increasing number of institutions are developing their own tools according to the characteristics of the population they serve.
Preventing Falls

(Evans et al, 1998, Oliver et al, 2004, Lane, 1999, McCarter-Bayer et al, 2005). The Joanna Briggs Institute (Evans et al, 1998) found that demonstration of usability of assessment tools in clinical practice is still insufficient, and from the currently available ones "no particular risk assessment tool can be recommended". While assessment tools may raise the overall staff awareness of falls and increase their reporting (Evans et al, 1998, Morse, 2002, Williams et al, 2007), the value of the commonly used assessment tools is very limited.

Based on identified overall low accuracy of the currently used Morse Falls Scale and current research, a team of nurses including a clinical nurse specialist developed a new fall assessment tool – LFRAS (Legacy Falls Risk Assessment Tool, 2007) which captures the characteristics of the patient population in the area of healthcare services offered through the system. The scale focuses on five areas of risk factors: history of previous falls in the last year, impaired mobility and balance, impaired cognition, sensory deficits, and impaired toileting. While the above factors are documented strong predictors of falls in the nursing literature, the impact of medications and external environment factors are not included. Balancing simplicity of an assessment tool and comprehensive inclusiveness of risk factors may be hard to achieve in clinical settings. The preliminary analysis of LFRAS shows high sensitivity and specificity (personal communication, 2007). In the process of implementation the validation of predictive value and overall accuracy of the instrument will help determine the value of self-developed tools and a proper design of an evaluative process.
Recordings of other institutions' attempts to create their own fall assessment tools will help further the research on fall prevention programs and lead to an agreement of the most important domains included in such tools.

V (B) Multidisciplinary Interventions

Although multiple authors documented the lack of rigorous research for or against multifactorial interventions (ANA 2008, Evans et al, 1998, Gillespie et al 2003, Hitchcock et al, 2004), several others reported a positive effect of multidisciplinary fall prevention programs that included staff and patients education, continuous patient reassessment, process improvements, and communications of results within the hospital setting (Browne et al, 2004, McCarter-Bayer, 2005; Mitchell & Jones, 1996, Sulla & McMyler, 2006; Schwendimann et al, 2006).

While nursing needs to be in the forefront of falls reduction initiatives, no single discipline can achieve this ambitious goal alone. The complex etiology of falls requires the combined efforts of a multidisciplinary team involved in all aspects of patient care in acute care settings. Evidence-based research reports collude that when multiple factors for falls are targeted concurrently, the fall prevention programs have higher incidence of reducing the incidence and severity of falls (McFarlene-Kolb, 2004, Schwendimann et al, 2006, Sulla & McMyler, 2006).

Multiple researchers also advocated for tailoring prevention programs according to the level of patient risk – low, medium, and high risk care plans (Williams et al, 2007), with several studies concurring that components of successful programs should include the following major areas: individual patient risk assessment (fall assessment tools),

Meyers and Nikoletti (2003, as cited in Akyol, 2007) summarized the characteristics of successful fall prevention programs, as ones that are acceptable and applicable to the affected population (applicability); alter outcomes of falls and fall-related injuries (efficacy); are cost-effective (cost-effectiveness) and are readily applicable to everyday practice (practicability). In order to be effective results of the program need to be disseminated in a timely manner to all stakeholders and the components of such a program need to be easily adjusted based on early failures or achieved results. Therefore, in the author’s opinion an additional requirement for flexibility may be added to the above list of suggested characteristics.

V (C) FallSaver

Monitoring patients at high risk for falls requires adaptation of existing available technologies or creating new clinical decision support systems (CDSS) with the aim of helping nursing reduce the incidence of falls in the hospital setting. As mentioned earlier nursing literature provides scant reposts on the use of such CDSS-s. Aside from the well known bed alarms, only one study provided evidence of such an application in a skilled nursing facility from the Veterans Administration system in United States (Clifton et al, 2007). There are well documented applications of CDSS in acute care setting (Saba
because of their high accuracy, functionality, availability, and reliability of provided data and analysis, however none have been integrated so far into fall prevention initiatives.

The FallSaver System is a type of passive CDSS, a monitoring tool that can be embedded into a multi-factorial and multi-disciplinary fall prevention program in order to achieve a measurable reduction in the number of fall incidents and the injuries related to them. Clifton et al (2007) documented a 50% decrease in the frequency of falls in the six months following the installation of the FallSaver System, as well as 82% injury reduction in elderly at risk patients. Limitations of the study include a short period of observation (six months), higher than usual mean age (82.2 years), population type (predominantly men), and lack of integration of the device into a comprehensive program.

A limited feasibility study regarding the use of the device in the Legacy Health System produced initial positive results in cardiac and medical-surgical populations (personal clinical experience as an MN student, 2007), but no valid conclusions can be drawn at this point due to the limited number of participants (10) and the lack of strong research methods applied in the study.

Currently, the majority of monitoring systems include bed or chair alarms in the acute care setting (Evans et al, 1998) While improvements in the alarm systems are constantly advertised by their manufacturers (www.alimed.com; bed-check.net, thebeddingsite.com), few of them such as the FallSaver have been tested in clinical settings with documented results of fall incidence reduction (Clifton et al, 2007).
The FallSaver System is a wireless, discrete, unobtrusive and non-restraint device (www.fallsaver.net) that implies straightforwardness of use by nursing and support staff, as well as wide institutional acceptance due to design simplicity (two main parts), portability, and a provision for multiple clinical tasks application (the author is currently testing the possibility of adjustments for use in interventional cardiology environment). Unlike other alarm systems, FallSaver does not produce falls alarms (or nuisance alarms, meaning signaling when patient is only moving about in bed without being physically out) and allows portability (can be used in chair or while supervised physical or toileting activities are performed). The system has software components that can generate fall reports at the actual time of the event, documentation of the patient’s attempts to get out of bed and trends identification, therefore constantly updating the fall-risk profile of a particular patient, and alerting nurses of needed adjustments in the individual plan of care (www.fallsaver.net). Thus the designation of falls as “incident report cases” and the process of filing them manually or into computerized documentation systems by nursing staff can be avoided. Instead, the focus on improving patient care can bring the much need reduction of falls prevalence rates in acute care.

The ECRI Institute (a non-profit organization) with a focus on applied scientific research and evidence-based practice recommended in 2004 features for effective fall prevention clinical support systems (www.ECRI.org). Although a review of the FallSaver features appear to meet most of the above recommendations, future studies with representative hospital populations can confirm its ability to reduce falls in acute care. The company reported that in the autumn of 2007, 28 hospitals chose FallSaver over other devices due to its desirable features (www.fallsaver.net), however more applied
research studies with vigorous criteria and methods need to replicate and confirm the casual relationship between the device’s application and the fall incidents reduction. While no CDSS can substitute providers’ decisions or nursing interventions, systems such as the FallSaver can effectively assist staff in improving nursing-sensitive quality of care indicators (such as falls), and should be built into comprehensive and well designed fall prevention programs.

VI. Conclusions


In addition, the lack of an agreement on a definition of falls leads to errors in reporting the incidence of falls and reduces the inclusion of possible interventions into a multi-dimensional and comprehensive fall prevention initiative. Definitions that are too inclusive or too restrictive will prevent nursing researchers from considering litigations and process-improvement aspects of targeted interventions, inclusion of individually tailored care plans and the ability of a program to reflect flexibility, consequently impacting negatively the opportunities for environment and cultural changes.
To be successful a fall prevention program needs to include multidisciplinary interventions, as well as meet certain criteria, such as applicability, efficacy, cost-effectiveness, practicability, and flexibility. Moreover, a viable program will include three distinctive and well-designed components - assessment tools for identification of the population at risk, nursing and multidisciplinary interventions (including Clinical Decision Support Systems, such as FallSaver), and on-time system-wide monitoring or reporting of the results which will allow for immediate adjustments in the desired program outcomes.

Finally, the analysis of nursing literature and the systematic review of falls performed by the author, indicate a wide variety of research opportunities in the areas of development of fall assessment tools and their testing in particular clinical settings (including calibrations according to different environments and client populations), measurement of the financial impact of patient falls on hospitalization cost, development and testing of multifactorial interventions, application of CDSS in fall prevention initiatives, and examination of the causal relationship between actual reduction in falls and fall prevention programs.

Preventing falls in the acute care setting is a current mandate. In the external economic environment of reduced Medicare and insurance reimbursements and constantly increasing patient acuity and cost of providing health care, as well as patient demand for high quality of services, hospitals have to revisit their current practices and design organizational procedures and programs to reduce substantially unnecessary expenses and continue to be competitive in the marketplace. Technical innovations and nursing staff involvement in such institutional initiatives will improve patient outcomes,
nursing sensitive quality indicators (including falls prevalence and related injuries), and client satisfaction with provided care. While past research offers little help for clinical practice today (Evans et al, 1998), the above initiatives will create further opportunities for a rigorous methodological research and evidence-based nursing practice.

Nursing leaders need to understand the financial and long-term implications of increasing fall rates and seek and support opportunities to support opportunities for their reduction. Clinical Nurse Specialists (CNS) can help leaders and staff nurses involved in direct patient care in designing interventions to increase awareness and prevent falls, for developing and testing assessment tools appropriate for different practice environments, and for compliance with well structured and multidisciplinary fall prevention programs. A change in current practices and a sustained program success require a partnership between all stakeholders at all organizational levels responsible for high quality and effective patient care. The much needed change will reflect not only a reduction of fall rate in an organization, but more importantly the safe environment in which high quality nursing care is delivered.
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