Falls Risk Assessment: A Foundational Element of Falls Prevention Programs

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ABSTRACT

Falls risk assessment is a foundational element of falls prevention programs. Many falls risk assessment tools have been developed to screen for risk factors most predictive of falls. Studies have found that these tools accurately identify patients who will fall or those who are at high risk of falling with a sensitivity and specificity of greater than 70%. Pairing risk assessment with functional assessment tests and injury risk assessments shows promise of further delineating patients at highest risk of falls and falls-with-injury events. Initial screening for falls risk using these tools forms the basis for further risk assessment and formulation of a multifactorial falls prevention plan with interventions targeted to the risk factors identified. In 2011, the Pennsylvania Patient Safety Authority received reports of more than 32,000 falls. Of these patients who fell, 64% were reported to have had a falls risk assessment completed, 60% had been identified as at risk for falling, and 65% were reported to have had prevention strategies in place. While these statistics may reflect a lack of documentation, rather than a deficiency in practice, evaluation of compliance with best practices with respect to falls prevention is warranted, beginning with performance of a falls risk assessment for all patients. (Pa Patient Saf Advis 2012 Sep;9[3]:73-81).

Scan this code with your mobile device's QR reader to access the Authority's falls prevention toolkit.

INTRODUCTION

Falls are the leading cause of injury-related death in adults over age 65, with death rates rising sharply over the past decade. One out of three adults over age 65 falls each year, and adults age 75 or older are four times as likely to suffer an injurious fall as adults age 65 to 74.[1] Hospitalization increases this risk due to the interplay of intrinsic falls risk factors (e.g., symptoms of illness, treatment side effects) and extrinsic falls risk factors (e.g., unfamiliar environment, intravenous lines and other attachments).[2]

The majority of falls can be attributed to a physiologic cause, with 78% of falls labeled "anticipated" (i.e., physiological falls that can be predicted in patients exhibiting clinical signs that contribute to increased falls risk), and 8% labeled "unanticipated" (i.e., physiological falls that cannot be predicted before their first occurrence). The remaining 14% of falls are labeled "accidental" (i.e., the result of mishaps often attributed to environmental causes). The differentiation of fall types is important because methods for prediction and prevention differ according to the fall type. Anticipated physiological falls can be prevented through screening for falls risk factors, in-depth assessment, and implementation of targeted prevention strategies. Accidental falls can be prevented through environmental controls that seek to provide a safe environment. Unanticipated physiological falls are, by their nature, not preventable at first occurrence.[3]

There is increasing regulatory and reimbursement pressure on hospitals to prevent patient falls. In 2002, hospital falls resulting in patient death or serious disability were labeled as serious reportable events by the National Quality Forum (NQF).[4] In 2008, these serious reportable events were labeled as hospital-acquired conditions (HACs) subject to nonpayment by the Centers for Medicare and Medicaid Services (CMS).[5] And beginning in federal fiscal year 2015, hospitals in the worst-performing quartile in terms of national HAC rates will receive a 1% reduction in Medicare payments across the board for all discharges as part of the Patient Protection and Affordable Care Act.[6]

Considering the growing population of older adults and their increased risk of falls and falls injuries, the cost of falls is expected to grow in terms of both human suffering and financial cost to individuals and healthcare providers. CMS has recognized this as a focus area for improvement as part of the Partnership for Patients (PFP), an initiative that aims to decrease HACs by 40% by the end of 2013.[7] Recognizing that not all falls are preventable, the specific goal related to falls is "to cut the number of preventable fall injuries in half while maintaining or increasing patients' mobility."[8] The Pennsylvania Patient Safety Authority is currently partnering with the Hospital and Healthsystem Association of Pennsylvania and 81 hospitals across the state as part of the PFP Hospital Engagement Network (HEN) Falls Reduction and Prevention Collaboration.

FALLS IN PENNSYLVANIA

Falls continue to be one of the safety events most frequently reported to the Pennsylvania Patient Safety Authority.[9] In Pennsylvania, the rate of hospital falls with trauma is 0.581 per 1,000 discharges, and this is slightly higher than the national rate of 0.562 per 1,000 discharges.[10] Nationally, patient falls with injuries are estimated to cost $19 billion per year in direct medical costs.[11] At the level of the individual patient, the average increase in facility operational costs for a serious falls injury is $13,316, and the average increase in length of stay is 6.27 days.[12] Based on these numbers, the additional operational cost to Pennsylvania hospitals for falls with harm in 2010 is estimated to

have been $15,406,612 and 7,254 days in additional length of stay.* This operational cost does not include additional costs (e.g., legal fees, potential lost revenue due to patient dissatisfaction) that may have been incurred as a result of these falls.

Between 2008 and 2010, Pennsylvania hospitals reported 135,221 falls, of which 85.7% (n = 115,884) occurred in inpatient care areas (e.g., medical-surgical units, critical care units, inpatient psychiatric units), 10.0% (n = 13,538) occurred in care areas that provide services to outpatients and inpatients (e.g., emergency department, radiology), and 4.3% (n = 5,799) occurred in ancillary departments, labs, or unspecified locations.[13] The largest number of inpatient falls (N = 115,884) occurred in general medical-surgical units (38.3%, n = 44,400). Eight other inpatient care areas (e.g., psychiatric units, critical care units, rehabilitation units) account for the remaining 61.7% (n = 71,484) of inpatient falls.[13]

FALLS RISK ASSESSMENT IN PENNSYLVANIA

In a review of falls-related sentinel events (i.e., falls resulting in death or permanent loss of function) reported from 2004 to 2011, the Joint Commission identified a deficiency in assessment (i.e., adequacy, timing, or scope of assessment) as the number one root cause.[14] Authority analysts queried the Authority's Pennsylvania Patient Safety Reporting System (PA-PSRS) database for falls events reported during 2011 to evaluate whether or not patients who fell had a completed falls risk assessment, were identified at risk for a fall, and had prevention strategies or protocols in place.

In 2011, 32,802 patient falls were reported. Data from these falls event reports were analyzed following a three-step process. Primary analysis of these reports revealed 64% (n = 21,117) with completed falls risk assessments, 5.2% (n = 1,712) lacking falls risk assessments, and 30.4% (n = 9,973) with a risk assessment status that was unknown. The 30.4% finding suggests that, at minimum, there was no reported documentation that this activity was performed. The subsequent analyses took the lack of documentation into consideration.

The second analysis focused on the percentage of falls events reported for patients who were identified as at risk for a fall. In order to identify patients at risk for falls, risk assessments must have been completed. Therefore, falls event reports indicating completion of falls risk assessments (N = 21,117) were used for this analysis. Of these falls events, the analysis showed that 77.2% (n = 16,302) were reported for patients who were identified as at risk for a fall, 18.5% (n = 3,907) were reported for patients identified as not being at risk for a fall, and 4.3% (n = 908) were reported for patients with risk statuses labeled as unknown.

Once a patient is identified as at risk for a fall, the next step in a falls program is to perform an in-depth assessment of the risk factors identified through screening and to implement targeted falls prevention strategies. This final analysis evaluated whether the implementation of prevention strategies or protocols differed when risk assessments were completed and falls risks were identified. Three separate analyses were performed. The analyses showed that less than half (44.7%, 14,672 of 32,802) of the falls event reports indicated that all three activities had been implemented and documented (i.e., completed risk assessment, falls risks identified, and falls prevention strategy in place). Table 1 shows the different levels of falls prevention strategy implementation, stratified by completed falls risk assessment and falls risk identification.

RISK ASSESSMENT

Falls risk assessment is a foundational element of falls prevention programs. A number of organizations have developed evidence-based clinical guidelines for falls prevention, all of which begin with some form of falls risk assessment.[15-22] It is recommended that a falls risk assessment be done on admission, upon transfer from one unit to another, with any status change, following a fall, and at regular intervals.[15,18] In 2005, the Joint Commission required "an initial assessment of a patient's risk of falling, as well as conduct of periodic reassessments to enable actions to address potentially increased risks" as part of what was a new National Patient Safety Goal (NPSG) at that time: to "reduce the risk of patient harm resulting from falls."[23] This NPSG was upgraded to a standard in 2010, with the following two elements of performance: "the hospital assesses and manages the patient's risks for falls," and "the hospital implements interventions to reduce falls based on the patient's assessed risk."[24]

RISK ASSESSMENT TOOLS

Over 400 independent risk factors have been studied and found to be associated with increased incidence of falls.[25,26] Using a retrospective case-control study design, researchers have narrowed this long list of potential risk factors to shorter lists of key risk factors found to be most significantly associated with falling. These risk factors have then been translated into falls risk assessment tools.[25,27,28] Other risk assessment tools have been created by individual facilities as part of quality improvement efforts based on review of the literature and facility-specific information from incident reports and medical record reviews for falls. The validity of falls risk assessment tools is measured in terms of sensitivity and specificity.

* Additional costs were calculated using the average additional cost per falls with harm ($13,316) multiplied by the Authority's total number of reported falls with harm in 2010 (1,157). The additional length-of-stay days were calculated using the average additional length-of-stay days (6.27) multiplied by the Authority's total number of reported falls with harm in 2010.

Table 1. Prevention Strategy or Protocol Implementation According to Risk Assessment and Risk for Fall as Reported to the Pennsylvania Patient Safety Authority in 2011

PREVENTION STRATEGIES OR PROTOCOLS IN PLACE	ALL PATIENTS WHO FELL, % (NO.)	PATIENTS WHO FELL WHO HAD A COMPLETED RISK ASSESSMENT, % (NO.)	PATIENTS WHO FELL WHO HAD A COMPLETED RISK ASSESSMENT AND FALLS RISKS IDENTIFIED, % (NO.)
Yes	65.2 (21,390)	82.2 (17,590)	87.4 (14,672)
No	15.0 (4,928)	10.0 (2,148)	9.5 (1,590)
Unknown	19.8 (6,484)	7.8 (1,652)	3.1 (519)
Total	**100 (32,802)**	**100 (21,390)**	**100 (16,781)**

Sensitivity is the ability to correctly identify at-risk patients who do end up falling (i.e., patients assessed at high risk among all of the patients who fell). Specificity is the ability to correctly identify a patient not at risk of falling (i.e., patients identified at low risk among all those who did not fall).

In a review of the literature from 2001, Perell et al. identified 20 risk assessment methods, including 14 nursing falls risk assessment tools and 6 functional assessment tests in use across acute care, long-term care, and community settings. The median sensitivity for the nursing falls risk assessment tools (e.g., Morse Fall Scale) was calculated to be 81% (range of 43% to 100%), with a median specificity of 75% (range of 44% to 88%). The median specificity of the functional assessment tests (e.g., Timed Up and Go) was found to be 85% (range of 77% to 93%), with a median specificity of 78% (range of 38% to 87%). Based on these findings, Perell et al. advocate the use of existing tools rather than the development of new tools, recommending the following criteria for selecting the most appropriate tool for specific settings: high sensitivity, specificity, and interrater reliability; similarity of patient population to ones in which the instrument was developed or studied; written procedures explicitly outlining appropriate use of the tool; reasonable time required for administration; and established thresholds identifying when interventions are necessary.[2]

In a similar review by Scott et al., nursing falls risk assessment tools and functional assessment tests were evaluated for validity, with results presented according to the settings in which they were tested. Within the acute care setting, five nursing falls risk assessment tools and three functional assessment tests were evaluated. The eight tools were found to have sensitivity ranging from 66% to 93% and specificity ranging from 25% to 88%. The authors concluded that several tools exist that demonstrate moderate-to-good reliability and that selection of the tool must be guided by the clinical context and the identified purpose of the tool (e.g., quick identification of high-risk populations, reduction of risk through reliable identification of remediable risk factors).[29]

In a systematic review of 13 falls risk assessment tools, Oliver et al. identified six risk factors that repeatedly emerged as significant in tools with levels of sensitivity and specificity over 70%, though no single tool assessed all six factors: history of falls, gait instability, lower-extremity weakness, altered mental status (e.g., agitated confusion, impaired judgment), altered elimination (e.g., urinary incontinence, frequency, need for assisted toileting), and prescription of high-risk medications (i.e., medications associated with higher falls risks).[30]

Table 2 provides a side-by-side comparison of falls risk assessment tools currently in use by hospitals in the Pennsylvania PFP HEN Falls Reduction and Prevention Collaboration: the Morse Fall Scale, the Hendrich II Fall Risk Model, and the Johns Hopkins Fall Risk Assessment Tool. The Morse Fall Scale was developed in the 1990s and is in widespread use across the United States. It is one of only two falls risk assessment tools that have been validated prospectively with sensitivity and specificity testing in its development and in subsequent remote cohorts. The other is the STRATIFY tool, which was developed in and is in more common use across the United Kingdom.[30]

The Hendrich II Fall Risk Model is another tool in common use across the United States. It was developed in an acute care setting with a diverse patient population and has been tested for validity in other settings on a limited basis. Initial results suggest superior predictive validity, reproducibility, and feasibility for use in acute care settings as compared with the Morse Fall Scale and the STRATIFY tool.[31]

The Johns Hopkins Fall Risk Assessment Tool was developed and implemented in 2003 at the Johns Hopkins Hospital. It has been evaluated for content validity and acceptability for clinical users in the adult clinical care units where it was implemented; however, the authors of the tool acknowledge that further validity and reliability testing is necessary.[32]

LIMITATIONS OF FALLS RISK ASSESSMENT TOOLS

Most falls risk assessment tools that have been tested for validity have been evaluated within the same patient population for which the tools were designed, so the accuracy of the tools has not been validated across different care settings with different patient populations.[30,33,34] Simple

Table 2. Risk Factors Assessed by Falls Risk Assessment Tools in Use by Hospitals Participating in the Pennsylvania Hospital Engagement Network Falls Reduction and Prevention Collaboration

RISK FACTORS	MORSE FALL SCALE	HENDRICH II FALL RISK MODEL	JOHNS HOPKINS FALL RISK ASSESSMENT TOOL
History of falls	√		√
Gait instability	√	√	√
Lower-extremity weakness			
Altered mental status	√	√	√
Altered elimination		√	√
High-risk medications		√	√
Secondary diagnosis	√		
Ambulatory aid	√		√
Intravenous line or heparin lock	√		
Dizziness or vertigo		√	√
Depression		√	
Male gender		√	
Advanced age			√
Automatic high- or low-risk triggers			√
Sensitivity	78%	74.9%	Not tested
Specificity	83%	73.9%	Not tested

Note: Sensitivity and specificity data for Morse Fall Scale is from: Morse JM, Morse RM, Tylko SJ. Development of a scale to identify the fall-prone patient. *Can J Aging* 1989;8:366-77. Sensitivity and specificity data for Hendrich II Fall Risk Model is from: Hendrich AL, Bender PS, Nyhuis A. Validation of the Hendrich II Fall Risk Model: a large concurrent case/control study of hospitalized patients. *Appl Nurs Res* 2003 Feb;16(1):9-21. Shaded rows indicate the six risk factors frequently found to be significant in risk assessment tools with high levels of sensitivity and specificity, as identified in: Oliver D, Daly F, Martin FC, et al. Risk factors and risk assessment tools for falls in hospital in-patients: a systematic review. *Age Ageing* 2004 Mar;33(2):122-30.

falls risk assessment tools have been found to have sensitivity and specificity greater than 70%,[30] but results can vary greatly when tested across varying patient populations.[34] The use of tools itself has been called into question based on research finding nursing clinical judgment is comparable to the use of risk assessment tools in identifying patients at risk to fall,[35-38] though the accuracy can vary based on nursing role and experience level.[35]

Regardless of the falls risk assessment method selected, it has been recommended that hospitals periodically test for internal validity using a two-by-two table to evaluate sensitivity and specificity.[39] Vassallo et al. have cautioned against relying on such testing for validity within the clinical setting. The challenge in evaluating the sensitivity and specificity of falls risk assessment methods is the fact that the identification of someone at a high risk of falling may be associated with implementation of falls prevention measures, even in the absence of a formal falls prevention program. Therefore, the rate of patients falling in the high-risk group may appear quite low (i.e., high sensitivity and low specificity) because interventions that successfully prevented falls were implemented.[38]

Though commonly referred to as risk "assessment" tools, these tools have alternatively been labeled risk "screening" tools.[17,22,37] This difference in terminology may be important in conveying the purpose of these tools. They are intended to be used as a consistent and reliable screening tool for identifying patients at risk of falling. They do not take the place of a thorough history and physical assessment. Screening should be followed by an in-depth multifactorial risk assessment and formulation of a plan of care detailing targeted falls prevention interventions.[15,17-22,40]

INDIVIDUAL FALLS RISK FACTORS

Falling is a complex phenomenon that results from a combination of risk factors. Meta-analyses of individual retrospective case-control studies have been completed in order to calculate the relative risk associated with each risk factor. Table 3 shows the risk factors associated with the highest risk of falling, along with their relative risk ratios.[41] Beyond the risk factors included in falls risk assessment or screening tools, these risk factors should be evaluated as part of an in-depth multifactorial risk assessment.

Table 3. Falls Risk Factors and Associated Relative Risk

RISK FACTOR	MEAN RELATIVE RISK RATIO (RANGE)
Muscle weakness	4.4 (1.5-10.3)
History of falls	3.0 (1.7-7.0)
Gait deficit	2.9 (1.3-5.6)
Balance deficit	2.9 (1.6-5.4)
Use of assistive device	2.6 (1.2-4.6)
Visual deficit	2.5 (1.6-3.5)
Arthritis	2.4 (1.9-2.9)
Impaired activities of daily living	2.3 (1.5-3.1)
Depression	2.2 (1.7-2.5)
Cognitive impairment	1.8 (1.0-2.3)
Age 80 or older	1.7 (1.1-2.5)

Source: Rubenstein LZ, Josephson KR. The epidemiology of falls and syncope. *Clin Geriatr Med* 2002 May;18(2):141-58.

PROFILE OF THE HOSPITALIZED PATIENT AT RISK TO FALL

Systematic review of studies involving risk factors for hospital falls reveals the profile of the patient at greatest risk of falling to be someone with a history of previous falls, impaired mobility, cognitive impairment, and special toileting needs.[42] Advanced age,[41,42] medications that act on the central nervous system,[42] and depression[42-44] are also contributors.

History of Falls

History of falling within a 1- to 12-month period has been evaluated across multiple studies and found to predict future falls with statistical significance and high relative risk. Because of this, it has been suggested that all falls risk assessments begin with screening for a history of falls within the previous 12-month period.[45]

Impaired Mobility

Gait speed and stride length decrease markedly beginning at age 85 for women and age 90 for men. Slower gait speed has been found to significantly correlate with increased falls.[46] In patients without a history of falling, screening for balance and gait problems significantly predicts future falls more than other risk factors.[45]

Cognitive Impairment

A clear link between increased falls risk and delirium and dementia has been established, especially when agitation and wandering behaviors are exhibited.[38,41,42,45] However, there is also evidence that decreases in global cognition and cognitive processing speed also increase falls risk in older adults without delirium or dementia.[47,48]

Toileting

Studies evaluating the circumstances of patient falls in the hospital setting have estimated up to 50% to be associated with toileting or other elimination concerns (e.g., incontinence, urinary frequency, diarrhea).[2,28,42,49,50] Toileting-related falls have also been found to increase the risk of fall-related injuries by an odds ratio (OR) of 2.4.[49]

Advanced Age

Risk for falls and falls with injury increase with age, with adults age 80 or older being in the highest-risk group.[1,41]

Medications

Certain medications have been found to have a significant association with falls in the elderly, including sedatives and hypnotics, antidepressants, and benzodiazepines.[51,52] In addition, falls risk in older adults has been found to increase with the use of cardiac drugs (including diuretics, antihypertensives, and antiarrhythmics) and analgesic drugs (opioid and nonopioid), as well as with the use of four or more medications, regardless of drug class.[53]

The Beers criteria, published by the American Geriatrics Society and recently updated in 2012, is a useful guideline for identifying potentially inappropriate medication use in older adults that contribute to adverse patient outcomes. The Beers criteria specifically identifies the following drugs to be avoided in patients with a history of falls or fractures: anticonvulsants, antipsychotics, benzodiazepines, nonbenzodiazepine hypnotics, tricyclic antidepressants, and selective serotonin reuptake inhibitors.[54] In an analysis of falls reported to the Authority in 2006, the medications most often mentioned in the reports included anxiolytics (benzodiazepines) and hypnotics, antidepressants, neuroleptics, opioid analgesics/antagonists, and insulin/oral hypoglycemics.[55]

The impact of medication on falls risk may be more pronounced in older adults, but it affects younger adults as well. Increased falls risk has been found in younger adults ages 25 to 60 who are taking two or more medications, most notably antihypertensives and cholesterol-lowering drugs.[56] In either age group, the challenge has been to separate the effects of the medication from the symptoms of the disease process itself and to evaluate the risks and benefits of treatment versus nontreatment when attempting to adjust medication regimens in order to minimize risk of falling.[57]

Depression

Depression and its association with increased falls and falls injury rates has been studied. Use of antidepressants, especially selective serotonin reuptake inhibitors, has been found to have a strong

association with falls and falls with injury. But apart from medication use, symptoms of depression, ranging from questionable to clinically significant, have been found to be independent predictors of falls[43,44] and have been included in at least one formal falls risk assessment tool.[28]

FUNCTIONAL ASSESSMENT TESTS

Several simple screening tools have been created to assess functional mobility. The Timed Up and Go test is one such tool that requires patients to rise from a chair, ambulate three meters, turn, return to the chair, and sit. Patients who require more than 14 seconds to complete this test are more likely to fall (sensitivity and specificity of 87%),[58] though debate exists as to the cutoff that is most sensitive and specific.[59]

A similar test called the Get Up and Go test was originally included as part of the Hendrich II Fall Risk Model but later modified to only include the observation of the patient rising from a seated position while resting their hands on their thighs. Patients who require use of their hands to push up in a single attempt are more likely to fall than those able to rise without using their hands (OR = 2.16). Those who push up and require multiple attempts have further increased risk of falling (OR = 4.67). And patients unable to rise have the highest risk of falling (OR = 10.08).[28]

Because history of falls and impaired mobility carry the highest relative risk of falls, screening for these two risk factors is often recommended as a simple and effective risk assessment method in outpatient areas, where each patient encounter is time-limited.[17,18,45]

INJURY RISK ASSESSMENT

Most falls do not result in injury.[1,9,13,41] But when they do, older adults are at a much higher risk of dying as a result of their injuries, with men over 70 and nursing home residents over age 85 having the highest mortality rates.[60-62] The following risk factors for injurious falls have been identified: cognitive impairment, presence of at least two chronic conditions, balance and gait impairment, low body mass index, female gender, poor vision and hearing, multiple falls, dizziness, and use of mechanical restraints.[41,63] Rubenstein and Josephson found that these risk factors for injurious falls match risk factors for falls in general, with the exception of female gender and low body mass index, which matches the profile of patients with osteoporosis who are prone to fall-related fractures.[41]

Use of an injury risk assessment algorithm labeled "ABCS" has been recommended as part of two falls prevention guidelines.[17,22] This algorithm was developed as part of a quality improvement project targeted to reducing falls with serious injury on medical-surgical units.[64] The letters represent risk factors for severe injury: **A**ge ≥ 85, **B**ones (e.g., osteoporosis, history of previous fracture, bone metastases, prolonged steroid use), **C**oagulation (e.g., bleeding disorders, anticoagulation), and **S**urgery (i.e., postsurgical patients, especially those who had recent limb amputation or major abdominal or thoracic surgery).[17,22]

Application of the ABCS injury risk algorithm is independent of falls risk assessment. Patients with risk factors for injury are at risk for suffering injury related to any number of causes other than falls (e.g., excessive bleeding from invasive procedures, fractures due to weight-bearing activities that place stress on weakened areas of bone). Combining the results of falls risk assessment with injury risk identification is recommended to help identify and focus heightened awareness on patients at highest risk for falls with serious injury.[62]

RISK REDUCTION STRATEGIES

Based on a review of the literature and evidence-based falls prevention guidelines, hospitals may consider the following strategies for falls risk assessment:

- Screen all patients for risk of falling.[15-22]
- Select a risk assessment tool that targets risk factors most predictive of falls.[25]
- Assess and periodically reassess the accuracy of the falls risk assessment tool within the clinical setting.[17,39]
- Evaluate the falls risk assessment tool across different clinical areas with different patient populations.[30,33,34]
- Use caution when interpreting validity of risk assessment tools within the clinical setting (i.e., a tool that identifies patients at risk who do not fall may be interpreted as having low specificity when in fact this may be the result of successful prevention strategies).[38]
- Consider screening patients for falls risk in outpatient areas using history of falls and a functional assessment test, such as the Timed Up and Go test.[17,18,45]
- Provide ongoing education to clinical staff on proper use of falls risk assessment tools.[15-22]
- Measure compliance with performance of risk assessments periodically, with the goal of 100% compliance.[17,18,20,22]
- Consider combining falls risk assessment with injury risk assessment to identify patients with the highest risk of falls with harm.[17,22,62,64]

Falls researchers have recommended that facilities choose from existing tools that have been tested for validity;[2,27] however, the Authority recognizes that some hospitals may be using facility-designed falls risk assessment tools or tools created through modification of existing tools. In this case, it is suggested that hospital falls prevention teams assess the validity of the tool internally, ensuring assessment for risk factors identified in the literature as being most predictive of falls. If validity cannot be confirmed, use of evidence-based falls risk assessment tools with established validity is suggested.

CONCLUSION

Falls prevention begins with screening for falls risk using a falls risk assessment tool. A large number of falls risk assessment tools have been created for use in hospitals.[2] Clinical judgment alone can be equally valid in some settings.[35-38] However, risk assessment tools offer the advantage of process standardization, a key to high reliability.[65] There is sufficient evidence to support the continued use of the Morse Fall Scale and the Hendrich II Fall Risk Model, as reported to be in use by hospitals across Pennsylvania participating in the PFP HEN Falls Reduction and Prevention Collaboration. The Johns Hopkins Fall Risk Assessment Tool requires further testing to establish validity.[32] The process of falls risk assessment does not end with screening for risk through use of these tools. Screening is to be followed by an in-depth assessment of each risk factor identified.[15,17-22,40]

Risk assessment alone does not prevent falls. Effective falls prevention interventions are multifactorial, provided by a multidisciplinary team, targeted to common falls risk factors for all patients, and tailored to each patient's specific falls risk factors.[40] Falls risk assessment is the foundational element necessary to establishing a successful falls prevention program. Hospitals must first perform a thorough evaluation of their current falls risk assessment processes before shifting focus to prevention interventions.

NOTES

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