

# Factors influencing the implementation of falls prevention practice in primary care

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## ABSTRACT

**Background:** Patient falls in the primary care setting are a complex problem and are detrimental to the independence and quality of life of older adults.

**Objectives:** The purpose of this integrative review is to identify what factors influence the implementation of fall prevention practice in the primary care setting. This review explores qualitative and quantitative research published between 2004 and 2018 on barriers to fall prevention management in primary care.

**Data sources:** The authors conducted a systematic search of the evidence and identified 18 articles which met the inclusion criteria.

**Conclusions:** Five themes were identified that described barriers in fall risk management in the primary care setting. These included provider beliefs and practice, lack of provider knowledge, time constraints, patient engagement, and financial issues.

**Implications for practice:** The lack of screening and assessment regarding fall risk identification demonstrates a gap in the management of older adults in primary care. Using the evidence- and theory-based Stopping Elderly Accidents, Deaths, and Injuries toolkit and algorithm is an effective method to assist practitioners with fall assessment and preventative measures.

**Keywords:** Fall prevention; primary care; STEADI.

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## Introduction

Falls can be detrimental to the independence and quality of life of older adults. In adults older than 65 years, falls can cause injuries, decreased mobility, loss of independence, and death. An individual's fear of falling can lead to activity limitation, social isolation, and depression. In the United States, falls are the most common cause of injury-related morbidity and mortality among older adults (Guirguis-Blake, Michael, Perdue, Coppola, & Beil, 2018). In 2015, medical costs related to fall-related injuries totaled \$50 billion, making falls one of the most expensive health conditions in people older than 65 years (Stevens & Lee, 2018). In fact, the average cost

for a fall-related injury requiring hospitalization is \$30,000 (Centers for Disease Control and Prevention, 2016). By 2030, the older adult population is expected to increase by 55%; if effective fall prevention interventions are not initiated, the projected increase in the older adult population will result in an estimated 48.8 million falls and 11.9 million fall-related injuries (Centers for Disease Control and Prevention, 2017).

Falls are a complex problem that involves a multidisciplinary approach for patient risk identification and prevention. Primary care practitioners have the ability to screen, assess, and intervene with patients to reduce and prevent falls in community-dwelling older adults. Approximately 30–40% of community-dwelling adults aged 65 years and older fall annually (Phelan, Mahoney, Voit, & Stevens, 2015). Based on the guideline created by the American Geriatrics Society and the British Geriatric Society, the United States Centers for Disease Control and Prevention (CDC) established the STEADI initiative—Stopping Elderly Accidents, Deaths, and Injuries. The STEADI initiative provides an algorithm (**Figure 1**) and toolkit to enhance provider knowledge and integrate fall assessment and management into clinical practice.

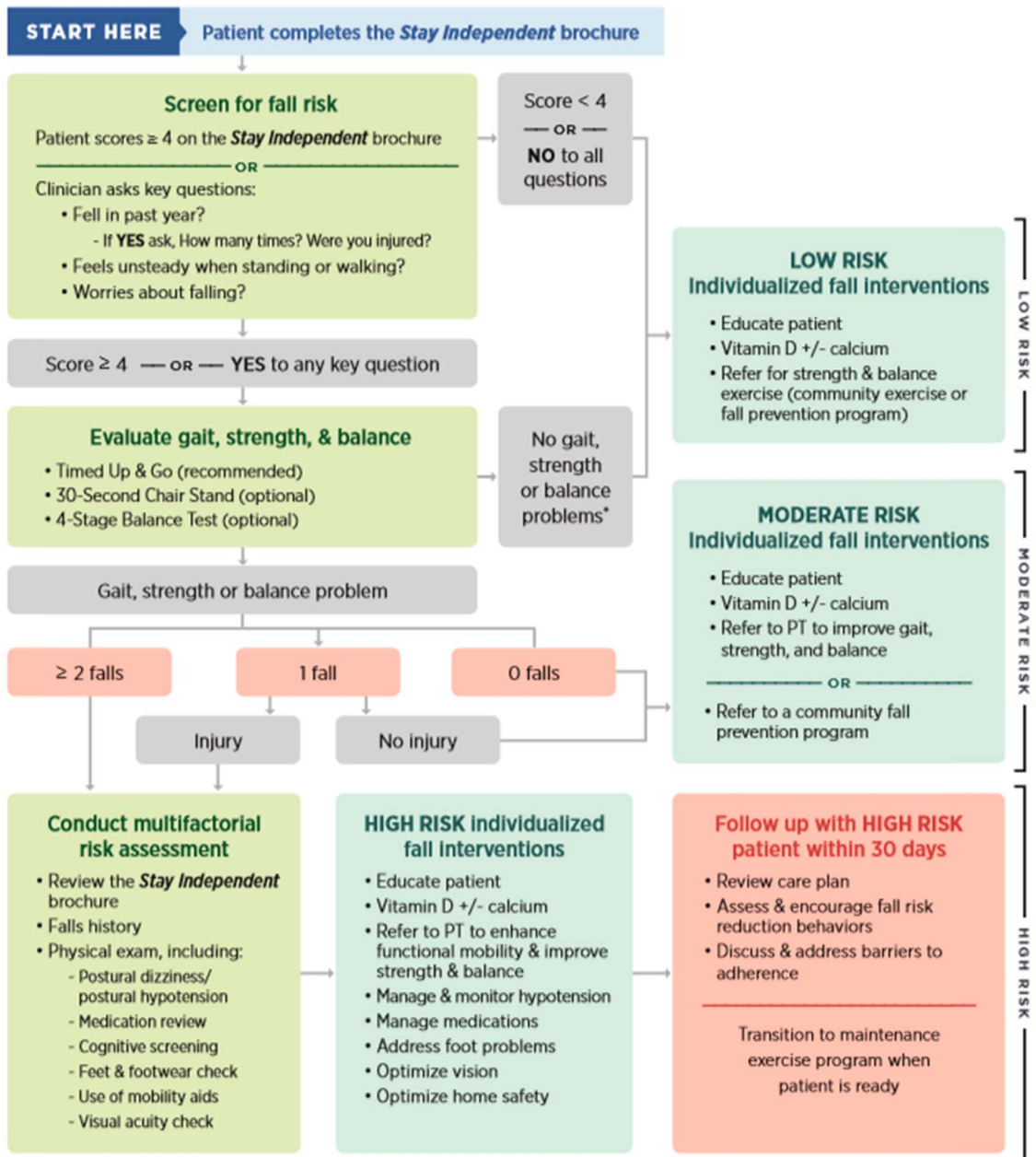
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# Algorithm for Fall Risk Screening, Assessment, and Intervention



\*For these patients, consider additional risk assessment (e.g., medication review, cognitive screen, syncope).



Centers for Disease Control and Prevention  
 National Center for Injury Prevention and Control

**STEADI** Stopping Elderly Accidents, Deaths & Injuries

2017

**Figure 1.** STEADI algorithm. STEADI = Stopping Elderly Accidents, Deaths, and Injuries.

Although the CDC recommends providers use the accessible, evidence-based STEADI concept to improve fall prevention practice and to enhance patient safety,

primary care providers are not consistently assessing patients for falls. A 2012 Cochrane Systematic Review found that a clinical assessment by a health care

professional in addition to individualized treatment of identified risk factors with appropriate follow-up and referral reduced the occurrence of falls by 24% (Phelan et al., 2015). This integrative review explores the factors influencing fall prevention management in the primary care setting.

### Literature search

This review followed the integrative review methodology identified by Whittemore and Knafl (2005). A systematic search of the evidence was conducted using electronic databases, academic journals, and ancestry searching; PubMed, Cumulative Index to Nursing and Allied Health Literature, Google Scholar, and Cochrane were the bibliographic databases studied. The researcher searched 4,200 articles on older adult falls, primary care setting, and barriers. Articles were excluded that involved falls in hospitals, skilled nursing facilities, and assisted living facilities; articles that included adults with mental health conditions or adverse drug effects, allied health professionals, and children. The keywords added to search included “older adult falls”, “STEADI”, “fall prevention”, “primary care”, “fall assessments”, “community-dwelling older adults”, “geriatric falls”, and “barriers”. Inclusion criteria involved articles written in the English language that focused on the primary care setting with a discussion of barriers by providers, fall prevention, fall risk management, and older adults. In all, the researcher identified 18 articles from 2004 to 2018 that were relevant to the information needed. Articles published before 2010 were included to demonstrate the similarities in barriers despite the introduction that year of standardized, evidence-based fall reduction tools. The quality of the evidence is shown in Supplemental Digital Content 1 (available at <http://links.lww.com/JAANP/A115>).

### Data evaluation

Research from a systematic study in 2004 investigated the quality of care that community practitioners gave older adults for falls. The study found that there was a tremendous underdiagnosis of falls and gait disorders and a lack of patient adherence to treatments and recommendations. Providers commonly had incomplete physical assessments and inadequate documentation for patients, which displayed a lack of provider performance related to insufficient knowledge (Rubenstein et al., 2004).

In 2006, researchers in Connecticut conducted a qualitative study to identify facilitators and barriers to the implementation of fall risk management in the primary care setting. The Connecticut Collaboration for Fall Prevention developed an outreach program for primary care practitioners in the Hartford area and determined that logistical factors, physician factors, and patient factors hindered fall risk evaluation and management (Chou, Tinetti, King, Irwin, & Fortinsky, 2006). In fact, the study

found that only 30% of older patients in the primary care setting were questioned about falls.

A New York State Fall Prevention Project funded by the Centers for Disease Control demonstrated that many providers do not feel that they have sufficient knowledge to conduct a fall risk assessment nor sufficient education about how to prevent falls (Smith et al., 2015). In this study, 38 medical providers from 11 health care practices within a New York health system completed surveys regarding fall prevention in practice. The questionnaire showed that less than 40% of providers asked most or all of their patients older than 65 years if they had a fall within the last year. Less than 25% of providers referred patients for treatment of mobility or gait issues, and less than 20% of providers referred patients to community-based fall intervention programs. When providers were asked to categorize the importance of falls in comparison with musculoskeletal conditions, mental health, diabetes, and cardiovascular disease, the surveyed providers ranked falls as the lowest priority among the other conditions (Smith et al., 2015).

Goodwin, Jones-Hughes, Thompson-Coon, Boddy, and Stein (2011) systematically reviewed 15 articles dated from 1980 to 2010 and incorporated the effectiveness of methods implementing fall prevention programs in community practice. They found that time constraints, lack of skills and knowledge, financial issues, fragmented and uncoordinated care efforts, and complex social and health issues were barriers to implementing effective fall prevention strategies (Goodwin et al., 2011).

Researchers performed a qualitative study in the United Kingdom to explore older adults' perceptions of the barriers and facilitators to fall prevention participation. The response of health professionals to patients' concerns was a common barrier to proper fall risk interventions. Health professionals commonly failed to discuss fall prevention interventions with their patients; in addition, patients felt that falls were not a medical problem and that their providers were disinterested in this information (Dickinson et al., 2011).

Another study surveyed primary care providers from two accountable care organizations in Massachusetts to assess their perspective of fall risk assessment and interventions for their elderly patients. Although 95% of providers believed that all older adults should be screened for fall risk, only 85% percent believed that the assessment would be a valuable tool for risk identification; only 52% felt that they had adequate knowledge to conduct an evaluation (Howland et al., 2018).

A 2015 exploratory cross-sectional survey performed in Australia determined that only 27% of primary care providers asked their older patients about falls and 13.5% asked patients about their fear of falls (Kielich, Mackenzie, Lovarini, & Clemson, 2017). Although the providers felt that it was their responsibility to assess and intervene with

specific fall risk interventions, they concluded that demands of clinical practice, lack of training, workload, and lack of patient engagement were barriers to properly screen and assess patients in clinical practice (Kielich et al., 2017).

In 2015, researchers reviewed 29 articles and found that health care providers' intrapersonal, interpersonal, institutional, community, and public policies were barriers to fall risk prevention. Among the barriers that affected fall risk assessments being performed in primary care were providers' beliefs or attitudes, knowledge, skills, motivation, and resources (Moreno-Paul et al., 2015).

In 2014, a survey of 1,210 primary care providers sought to determine how they regarded fall prevention approaches with their older patients. The survey revealed that 90% of providers had never discussed fall prevention with older patients (Burns, Haddad, & Parker, 2018). The researchers noted that to incorporate effective strategies and interventions, provider education must be enhanced; as such, various interventions were ordered based on the provider's training and practice scope.

A prospective cohort study conducted a baseline and a 1-year cross-sectional survey in Australia to define barriers about fall prevention perspectives of patients and health care providers. The researchers found that evidence-based guidelines and referral consultations could improve fall prevention practice (Lee et al., 2013).

In 2012, researchers reviewed articles from 1980 to 2012 to identify barriers to implementing effective fall prevention interventions. Three concepts prevailed through the analysis of 19 articles: practical considerations, adapting for community, and psychosocial factors; these factors demonstrated the multifactorial and complex process from perspectives of the community-dwelling older adult and health care providers (Child et al., 2012).

Laing, Silver, York, and Phelan (2011) reviewed the attitude, beliefs, and knowledge of providers and older adults regarding fall prevention. Most providers believed fall management to be important but less than one-half felt knowledgeable about recommendations and prevention practices. Older adults did not feel that they were at risk of falling and reported motivation to participate in fall prevention strategies only after an incident occurred that increased their perceived risk (Laing et al., 2011).

A cross-sectional study using structured interviews explored the views of fall risk assessment and management in practice by health care providers. Patient compliance, lack of Medicare reimbursement, insufficient provider availability, unavailable community resources, and financial issues were perceived barriers to effective fall risk management (Fortinsky, Iannuzzi-Sucich, Baker, Gottschalk, & King, 2004).

In North Central Connecticut, researchers performed a dissemination project in 2005 to identify barriers to incorporating evidence-based fall prevention management

into practice. Providers identified several barriers, including a perceived lack of expertise and Medicare coverage, an insufficient referral patterns between providers, a lack of federal mandate for physicians, and a lack of awareness of fall preventability and morbidity (Baker et al., 2005).

A qualitative study performed in Malaysia identified barriers among health care providers who cared for older adults. Patient perception of the normalization of falls in aging adults deterred them from speaking about this condition with providers; in addition, insufficient training in fall prevention management, lack of skill and knowledge, and lack of standardized guidelines hindered providers' ability to manage falls (Loganthan, Ng, Tan, & Low, 2015).

Jones, Ghosh, Horn, Smith, and Vogt (2011) randomly sampled primary care physicians from a statewide health care database about fall prevention practice and barriers encountered with screening. Prioritization of falls, lack of time, and lack of educational literature were the most commonly reported barriers (Jones et al., 2011).

Milisen, Geeraerts, and Dejaeger (2009) used a descriptive study, which was performed by 10 local health networks throughout Flanders, Belgium. In total, 99 primary care workers and 1,142 community-dwelling older patients participated in the study to test the integration of fall prevention guidelines in daily practice. Barriers perceived included time constraints, poor motivation of patients, insufficient collaboration and cooperation between health care workers, and inadequate financing mechanisms for fall prevention (Milisen et al., 2009).

Stevens and Phelan (2013) reviewed the literature and found that community physicians did not sufficiently identify falls and gait disorders or evaluate patients who reported falling. Only 8% of providers used clinical guidelines, and 94% were unaware that STEADI guidelines existed. Providers felt that they lacked information for assessment and fall prevention strategies and only asked 37% of patients about their fall history (Stevens & Phelan, 2013).

### Data analysis

According to fall prevention research and analysis of the 18 articles included in this review, there were common factors that influenced the implementation of fall prevention management in primary care (**Table 1**). Falls and injury prevention are public health priorities. Assessment, screening, and preventative interventions for older adults at risk of falls are essential to reduce risk and enhance safety. Overall, this researcher found five consistent themes; they are reviewed below.

**Provider beliefs and practice.** The most common barrier of effective fall risk management in primary care was related to provider beliefs and practice. Each of the 18 articles reviewed included this theme.

Lack of physician availability and cooperation, unavailable relevant services in the community, fragmented services or organization issues, and lack of coordination were contributing factors to inadequate fall prevention management in primary care (Chou et al., 2006; Fortinsky et al., 2004; Goodwin et al., 2011; Loganathan et al., 2015; Milisen et al., 2009). Physicians believed that fall prevention was important, but many revealed that they were uncertain about how to include this in practice and that they did not adequately refer high-risk patients to proper interventions (Chou et al., 2006; Dickinson et al., 2011; Milisen et al., 2009; Rubenstein et al., 2004). Providers often did not prioritize falls over other health conditions, and some did not express interest in learning about fall prevention management (Burns et al., 2018; Chou et al., 2006; Jones et al., 2011; Stevens & Phelan, 2013).

Provider perceptions of fall risk and lack of awareness have contributed to inadequate fall risk assessment (Burns et al., 2018; Child et al., 2012; Chou et al., 2006; Lee et al., 2013). Many providers lack support, consistent routine assessment, and commitment to referring patients when applicable (Howland et al., 2018; Kielich et al., 2017; Moreno-Paul et al., 2015; Smith et al., 2015). Providers cited the lack of trained personnel, scant awareness of the importance of fall prevention, and the lack of making fall management a priority as other barriers they faced (Laing et al., 2011). It was also noted that adopting new management and guidelines in practice can be challenging because of provider turnover (Baker et al., 2005). By increasing practitioner awareness that falls are common and preventable in older patients, fall management can be prioritized (Baker et al., 2005).

**Lack of knowledge.** A tremendous barrier to implementing effective fall prevention strategies in primary care is lack of practitioner knowledge and skill. Of the 18 articles reviewed, 89% of them suggested that insufficient knowledge or expertise was a factor in the implementation of fall prevention practices (Baker et al., 2005; Burns et al., 2018; Chou et al., 2006; Howland et al., 2018; Jones et al., 2011; Kielich et al., 2017; Laing et al., 2011; Lee et al., 2013; Loganathan et al., 2015; Moreno-Paul et al., 2015; Smith et al., 2015). Research has shown that many providers do not feel sufficiently informed to educate patients on fall prevention or conduct a fall risk assessment (Smith et al., 2015).

A related barrier is that community physicians displayed poor documentation and lack of physical examination, which led to underdetected falls and gait disorders (Rubenstein et al., 2004). Despite the availability of clinical guidelines for fall management, many physicians did not use them and instead reported that they did not have essential information for evidence-based fall prevention strategies (Stevens & Phelan, 2013).

Health care professionals view fall prevention as important but are lacking the knowledge to integrate the

guidelines into practice (Milisen et al., 2009). Some patients reported that health care providers assessed their fall risk and referred them to appropriate resources, whereas other patients reported that their provider had no knowledge of local interventions (Dickinson et al., 2011). Successful fall prevention programs implement training of health care professionals to enhance skill and alter behavior in clinical practice (Goodwin et al., 2011).

**Time constraints.** Researchers have found that institutional barriers including workload, demands of routine clinical practice, and time limitations are also barriers to fall prevention management (Goodwin et al., 2011; Jones et al., 2011; Kielich et al., 2017; Milisen et al., 2009; Moreno-Paul et al., 2015). With limited time during office visits, assessing and screening older adults for falls will increase discussion and the length of the visit, which is not practical in a high-volume facility (Loganathan et al., 2015).

Assessment for fall risk in older adults, which includes checking orthostatic, commonly is physically challenging and time consuming for providers (Chou et al., 2006). In a study in Connecticut, all provider working groups noted that an overwhelming amount of disease management guidelines, in addition to adding new services to already overloaded visits, is a tremendous obstacle to fall management (Baker et al., 2005).

Providers note the lack of time available with patients and trying to use time optimally as creating barriers to adequate fall risk assessment and screening (Child et al., 2012). Patients perceived that personal care within the home provided by professionals felt rushed and impersonal, compromising adequate fall risk management (Child et al., 2012).

**Patient engagement.** Knowledge, behavior, and beliefs of older adults can hinder proper management of falls (Goodwin et al., 2011; Howland et al., 2018). Health professionals felt that patients underreported gait disturbances and falls because they normalized falls as a part of aging (Chou et al., 2006; Loganathan et al., 2015; Phelan et al., 2015). Patients commonly lack caregiver or family support and experienced barriers in the health system when seeking fall prevention management (Loganathan et al., 2015).

In addition, patients fear the stigma associated with falls. Some patients viewed falls as a condition that negatively affects confidence, independence, and quality of life and that can lead to placement in a nursing home (Child et al., 2012; Loganathan et al., 2015). Cultural and social issues have contributed to patients believing that using an assistive device is weak or fatalistic, and would contribute negatively to an older adult's self-image (Child et al., 2012; Loganathan et al., 2015). Patients who are not motivated to change their lifestyle can be noncompliant with management, resistant to change, and experience

denial of their risk (Kielich et al., 2017; Milisen et al., 2009; Fortinsky et al., 2004; Laing et al., 2011).

Patients' knowledge also can influence their attitudes and contribute to their health decisions. Patients' beliefs, skills, motivation, and resources can affect whether patients comply with a provider's recommended modifications or interventions (Lee et al., 2013; Moreno-Paul et al., 2015). Patient reporting, feedback, out-of-pocket cost, and attitude about medications were additional factors that contributed to patient engagement (Chou et al., 2006).

Provider response was another barrier for accessing interventions for patients (Dickinson et al., 2011). Patients commonly did not share their fall history with their provider because they thought that falls were not medically related and that the provider would be disinterested (Dickinson et al., 2011; Lee et al., 2013). Impaired mobility, lack of resources, and scheduling abilities all effected a patient's ability to seek the appropriate resources to obtain fall prevention management (Chou et al., 2006).

**Financial factors.** National funding, Medicare reimbursements, and private medical insurance have hindered providers' abilities to offer comprehensive fall risk assessments and refer patients to an adequate intervention (Baker et al., 2005; Child et al., 2012; Fortinsky et al., 2004; Laing et al., 2011). Financial cost for assistive devices, transportation to interventions, and cost for attendance have deterred patients from participating in such programs (Child et al., 2012; Chou et al., 2006). Many providers felt that the amount of time required to complete a fall risk assessment was reimbursed inadequately and that there was an absence of sufficient financing mechanisms for fall prevention (Milisen et al., 2009; Child et al., 2012; Chou et al., 2006; Goodwin et al., 2011; Jones et al., 2011; Kielich et al., 2017; Loganathan et al., 2015). Public and private health organizations do not promote primary prevention and health promotion activities for fall risk management because they are considered to be unprofitable (Moreno-Paul et al., 2015). In addition, there is a lack of federal mandate for physician compliance to screen older adults for falls, which contributes to inadequate fall management (Baker et al., 2005).

## Conclusions

Primary prevention for falls begins in the community. Health care professionals in the primary care setting have a responsibility to assess each patient, identify fall risk factors, and assist with the modification of these risk factors, particularly because many patients who are at risk of falls do not consider themselves at risk. When patients are deemed a high fall risk, practitioners should provide resources to enable them to receive support to improve their quality of life and enhance health and wellness.

Despite established and accessible evidence-based clinical guidelines regarding fall prevention, primary care providers are not routinely incorporating evidence-based clinical guidelines into their practice. Research has shown various barriers hindering the implementation of fall assessments, screening, and interventions (Baker et al., 2005; Child et al., 2012; Chou et al., 2006; Fortinsky et al., 2004; Goodwin et al., 2011; Loganathan et al., 2015; Moreno-Paul et al., 2015; Smith et al., 2015). Provider beliefs and practices, lack of provider knowledge, time constraints, patient engagement, and financial factors have impeded primary care providers from implementing fall prevention practices successfully.

## Recommendations for nurse practitioners

As older adult falls continue to increase, there is a growing urgency for health provider intervention and management. Less than one-half of older adults who fall have talked with their health care providers about the fall (Phelan et al., 2015). Thus, health care professionals must routinely inquire about falls, assess and screen patients, and address risk factors with appropriate modifications and interventions as needed. In 2010, the CDC presented the STEADI initiative to assist providers in incorporating fall risk screening and fall prevention strategies into current practice. The CDC and the American and British Geriatrics Societies developed this clinical practice guideline for primary care providers that can be instituted with or without an electronic health record to ensure a coordinated approach to fall prevention.

The STEADI initiative includes a clinical algorithm created to assist practitioners in systematically screening, assessing, and intervening with patients who are deemed a high fall risk (**Figure 1**). STEADI recommends a multifactorial fall risk assessment for all adults older than 65 years and those of any age who present with balance or gait difficulty (Agency for Healthcare Research and Quality [AHRQ], 2018).

Multifactorial interventions should be initiated when indicated by assessment. A comprehensive medical history and physical examination, including cognitive and functional assessments, should be performed on older adults who answer in the affirmative on any of the fall screening questions. In addition, when practitioners identify abnormalities with gait and balance, they should conduct a multifactorial fall risk assessment. Included in this assessment is a history of falls, medication review, visual acuity, gait, balance and mobility, muscle strength, heart rate and rhythm, neurological or cognitive impairments, footwear, environmental hazards, and postural hypotension (AHRQ, 2018). Multifactorial interventions for community-dwelling older adults should have an exercise component involved (American Geriatrics Society [AGS], 2010). The STEADI initiative specifies programs that



**Table 1. Barriers to implementation of fall interventions**

Study	Provider Beliefs and Practices	Lack of Knowledge	Time Constraints	Patient Engagement	Financial
Howland, Hackman, Taylor, O'Hara, Liu, Bruschi	X	X		X	
Dickinson, Horton, Machen, Bunn, Cove, Jain, Maddex	X	X		X	
Smith, Stevens, Ehrenreich, Wilson, Schuster, O'Brien Cherry, Ory	X	X			
Laing, Silver, York, Phelan	X	X		X	X
Milisen, Geeraerts, Dejaeger	X	X	X	X	X
Child, Goodwin, Garside, Jones-Hughes, Stein	X		X	X	X
Lee, Day, Hill, Clemson, McDermott, Haines	X	X		X	
Goodwin, Jones-Hughes, Thompson-Coon, Boddy, Stein	X	X	X	X	X
Stevens, Phelan	X	X			
Fortinsky, Iannuzzi-Sucich, Baker, Gottschalk, King, Brown, Tinetti	X			X	X
Burns, Haddad, Parker	X	X			
Jones, Ghosh, Horn, Smith, Vogt	X	X	X		X
Chou, Tinetti, King, Irwin, Fortinsky	X	X	X	X	X
Loganathan, Ng, Tan, Low	X	X	X	X	X
Kielich, Mackenzie, Lovarini, Clemson	X	X	X	X	X
Moreno-Peral, Conejo-Ceron, Fernandez, Berenguera, Martinez-Andres, Pons-Vigues, Motrico, Rodriguez-Martin, Bellon, Rubio-Valera	X	X	X	X	X
Rubenstein, Solomon, Roth, Young, Shekelle, Chang, MacLean, Kamberg, Saliba, Wenger	X	X			
Baker, King, Fortinsky, Graff, Gottschalk, Acampora, Preston, Brown, Tinetti	X	X	X		X

implement strength training, gait, balance, or physical therapy (AGS, 2010).

Research from the Binghamton University State University in New York has shown that implementation of the STEADI initiative for older adults in the primary setting can decrease fall-related hospital admissions and potentially lower health care cost (Johnston et al., 2018). Included in this

study were 12,346 adults aged 65 years or older who visited one of the 14 outpatient clinics during a 3-year period.

Researchers measured the effectiveness of STEADI within the United Health Services system by patients' use of hospital services for fall-related conditions before and after implementation of the STEADI initiative. Those patients who were provided a fall care plan were 0.6 times less likely to

have a fall-related hospitalization than those patients without a fall care plan (Johnston et al., 2018).

The STEADI initiative identified older adults with an increased risk of falls; after determining increased risk, an assessment was used to modify risk factors. Interventions were then developed from evidence-based strategies. If STEADI were standardized among primary care providers, patients would be adequately screened and assessed for risks, allowing providers to make appropriate interventions to prevent falls.

Already well known is the lack of time providers have to spend with their patients. The nurse practitioner (NP) role is better served to work collaboratively with the patient and family to meet goals, rather than the traditional model of identifying an isolated problem and giving the solution (Judge-Ellis & Wilson, 2017). Research has also shown that the more time spent with a patient, the better the outcomes (Chen, Farwell, & Jha, 2009; Landau et al., 2007); unfortunately, reimbursement is primarily based on productivity and not on patient outcomes (Rapsilver & Anderson, 2000). Continued research is needed to identify models for reimbursement based on quality, much like what is happening in hospital systems. Changing the structure to include patient satisfaction and health outcomes is not something likely to happen quickly (Judge-Ellis & Wilson, 2017).

### Recommendations for nurse practitioner and other provider education

Currently, there are more than 270,000 NPs who are licensed in the United States (American Association of Nurse Practitioners (AANP), 2019), and over 28,000 new NP's who have recently completed a program (American Association of Colleges of Nursing (AACN), 2019). Unfortunately, only a small fraction of those NP programs have a primary emphasis on gerontology. The NP workforce is characterized by the majority (66.9%) credentialed as Family NPs, 12% as Adult NPs, and only 6% credentialed as an Adult-Gerontology NPs (AANP, 2019).

Nurse practitioners and physician assistants will account for a majority of primary care providers and therefore be responsible for providing quality care to the aging population (Institute of Medicine, 2008). AANP and others recognize NPs as integral to primary care delivery (American Association of Nurse Practitioners, 2017; Drummond, Abbot & Williamson, 2012), but the gap in education needs to be acknowledged to combat this issue. Education of primary care providers, including NPs and others, should be expanded to further combat the issue of falls in the primary care setting. More work needs to be done to improve geriatric competencies in NP and other health care provider educational programs until the number of NPs with credentials in adult-gerontology increases.

**Competing interests:** *The authors report no conflicts of interest.*

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