



# Assessing Fall Risk in Podiatric Practice

A new technology has been introduced that could be a powerful game changer.



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Performing Fall Risk Assessments is unfortunately not commonplace within podiatric medicine. Despite the increase in awareness and education over the last 15 years, there still exists confusion and a general lack of advocacy among DPMs. In addition, there has existed little consensus nor general acceptance of a "podiatric medicine-friendly" fall risk assessment tool to employ within the podiatric community. And despite the publication

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of literally dozens of fall risk assessment tools over the last 30 years, many of them involve areas of medicine and risk factors not relevant to the podiatric physician.

The phenomenon of falls has become well-established globally as a major public health problem and constitutes among the top health problems in the world. Seniors over 65 have the highest probability of falling down: 30% of them fall down at least once per year, while the percentages become higher (about 50%) with people over 80.<sup>1</sup> Falls exert a massive impact on lives and families, which makes the impact of fall-related disabilities for older individuals hard to measure. Falls remain among the top causes of disabling outcomes and institutionalization.<sup>2</sup>

Currently in the literature, there is no one study that summarizes the tools available to healthcare professionals according to the different specialties in which they operate. As stated in NICE, 2004, these patients should be cared for by professionals who have undergone appropriate training and who know how to initiate and maintain correct and suitable preventative measures.<sup>3</sup>

### The STEADI Initiative

In 2017 the CDC published the STEADI Initiative (Stopping Elderly Accidents Deaths and Injuries), which was created to offer a coordinated approach to implementing the American and British Geriatrics Societies' Clinical Practice Guideline for fall prevention. The STEADI initiative consisted of three core elements:

- 1) Patient screening for fall risk
- 2) Assessing modifiable risk factors (including many lower extremity risk factors)
- 3) Interventions to reduce risk by using effective clinical and community strategies.

Within the specific STEADI algorithm, specific lower extremity risk factors are noted:

- 1) Poor gait, strength, and balance observed
- 2) Feet/footwear issues identified.
- 3) Refer to a podiatrist

Additionally, the STEADI document advocated specific ways to assess fall risk factors, including:

- 1) The Timed Up and Go test (patients stand, walk 10 feet, turn around and sit down. If TUG takes more than 12 seconds, the patient is deemed at high risk for falling)
- 2) The 30 second chair stand
- 3) The 4-stage balance test
- 4) Gait assessment, specifically observation of:
  - Slow tentative pace
  - Loss of Balance

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## New Concepts and Studies

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- Short Strides
- Little to no arm swing
- Steadying self on walls
- Shuffling
- En block turning
- Not using assistive device properly<sup>4</sup>

According to the CDC, these gait characteristics “may signify neurological problems that require further evaluation.” Clearly these observational gait findings indicate lower extremity weakness, neurological deficits and altered postural stability that can be addressed by the podiatric physician.<sup>5</sup>

In 2010, the author produced a podiatric fall risk assessment tool based upon the STEADI document that was employed and used by some in the profession over the last decade; however, though clinically effective, the tool was not widely embraced for lack of reimbursement and trial-validation.

The National Council on Fall Risk Awareness and Prevention was created in 2019 by myself and 2 other podiatric physicians; we served on that council with the goal of establishing a simple lower extremity fall risk assessment tool—COVID, however, along with loss of funding, did not allow for the completion of the tool. The Council, however, did produce a very timely systematic review and clinical synthesis on lower extremity risk factors for falling among senior adults.<sup>6</sup>

### Some Progress, Some Barriers

With the advent and increased utilization of Ankle Foot Orthoses to address specific lower extremity risk factors, some good work was done to educate podiatric physicians regarding the value of performing fall risk assessments. With specific tools available for DPMs, including footwear, AFOs, and education, more doctors over the last decade have started analyzing gait, asking more questions about falling among seniors, and achieving positive results.<sup>7,8,9</sup>

In 2018 podiatrists were made aware of Medicare’s Merit-Based Incentive Payment System (MIPS) quality measures 154 and 155. Measure 154 included the performance of a fall risk assessment and 155 details the creation of a falls plan of care based upon a falls assessment. While some took advantage of this ‘incentive’, few today are aware of these measures and even fewer are performing an objective fall risk assessment due to lack of reimbursement and debate as what constitutes a podiatric fall risk assessment.

One in four Americans aged 65 and over falls each year. By identifying people with gait instability, podiatric physicians can actively reduce this risk and make fall prevention a valuable part of their practice.<sup>10</sup>

The primary purpose of using a fall risk assessment tool is not to reduce falls, but rather to identify specific risk factors that can be modified and to identify individuals at high and low risk. In this way, the subjects that need a more in-depth analysis are identified, and the healthcare professional’s attention is focused on the main risk factors responsible for falls. To these subjects should

be offered a multifactorial falls risk assessment. What is clear from the most current research with the multidimensional nature of the risk of falling, there is not an “ideal” single tool that can be used in any context or that performs a perfect risk assessment.<sup>11</sup>

Among the chief barriers that prevent fall risk assessment within the podiatric community include the following:

- 1) A real or perceived lack of capacity, time, or staff resources to deliver evidence-based falls prevention education.
- 2) EMR/software platform barriers related to documentation requirements for billing or validating the use of DME tools.
- 3) Confusion/ambiguity about the most appropriate falls prevention strategies upon identifying risk.
- 4) Lack of simplicity in the development of a plan of care for those at-risk
- 5) Lack of reimbursement for the performance of a falls risk assessment and the development of a plan of care.

Podiatric health professionals have a vital role in mitigating hospital falls and delivering evidence-based patient education.<sup>12,13</sup> There exists much ambiguity

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among providers as to the most effective clinical practice tools and there are also significant inconsistencies in falls education, content and delivery.<sup>14</sup> Time constraints and lack of staffing capacity and resources are major challenges as well, in agreement with Ackerman et al.<sup>15</sup> and Keyworth et al.<sup>16</sup> Another barrier is lack of communication among different health professionals; Lee et al.<sup>17</sup> reported that inconsistencies in education and communication can undermine the message of falls prevention and increased falls risk. And yet another barrier lies in the challenges of providing fast and appropriate documentation in lieu of the wide variety of EHR platforms can also be associated with adverse events,<sup>18</sup> including an increase in falls.<sup>19,20</sup>

Patient-specific risk factors must also be taken into consideration, as it is well-known that at-risk patients are often not aware of their falls risk or changes in mobility despite receiving falls education.<sup>21,22</sup> These patients can also have a fear of embarrassment or a reluctance to burden staff, or have a false sense of security that adversely affects adherence to recommended strategies.<sup>23,24</sup>

### A Potential Solution for the Podiatric Practice

Unfortunately, screening tools are often misused as assessments and assessments without an intervention component are not effective. Interventions uncritically introduced without focus on the patient’s needs are inefficient

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and often miss the underlying problem causing falls (postural instability, weakness, abnormal gait, foot deformity)

There currently exists technology (called SafeBalance) that has the potential to address most of the above stated barriers to performing fall risk assessments in podiatric clinical practice in line with the CDC STEADI algorithm. Additionally, these assessments are tethered to a risk score and specific interventions. Using this now-available technology, podiatric physicians can gather and assess patient risk factors that can be directly mitigated clinically or can become a gateway for further exploration through additional testing.

This web/app based platform not only identifies the risk factors present in the patient, it also clinically sup-

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**This new technology could be an extremely effective way to screen, assess and provide intervention all in one platform.**

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ports certain intervention pathways at the physician's disposal, including physical therapy/exercise, AFO/DME, and additional procedures/pathways designed to improve functional independence in the patients served.

While it is not the purpose of this article to serve as a commercial for this technology, it is my goal to let the reader know what is forthcoming. Having been using this technology for the past several months, it is my contention that this system could be an extremely effective way to screen, assess and provide intervention all in one platform—all this while meeting the two high-priority MIPS Measures, thus actuating the CDC's STEADI Algorithm.

This patented technology has the ability to integrate your fall risk assessment seamlessly into your current clinical workflow, all while tracking and stratifying your patients in order to clinically validate your treatment plan.

Better yet, the data analytics and reporting features of this tool provide valuable insight into your patient population for greater and more efficient management. Upon completion of the algorithm, performance measures are scored and a detailed treatment plan is produced that qualifies one to report a distinct HCPC/CPT Code for appropriate reimbursement. (HCPC/CPT coding utilizing this software platform is actively being used by orthopedic and podiatric practices along with many other specialties across the United States)

## The Specifics

The process involves the following steps:

### Step 1: Screen for Fall Risk Factors

During the initial part of the encounter, the patient is administered a screening questionnaire delivered via tablet or paper. This risk screening focuses on background information, specifically prior fall history, pain levels, walking deficits, living environment etc.

### Step 2: Assess to Quantify Severity

In the exam room, simple lower extremity performance tests are performed (podiatric specific testing tools are currently being added to the existing software platform) specifically targeting standing balance, ambulation/gait, and strength. These final metrics are added into the software and combined with the risk screening. From here, the risk screening results highlight some important information laying the groundwork for risk factors identified impacting the patient's conditions or functional independence level.

### Step 3: Report Generation

At the conclusion of this step, a report is generated based on the results from the screening data and performance metrics. This report not only highlights the risk factors identified, but calculates specific intervention pathways to mitigate those risks based on severity.

In the report, ICD-10 codes are created/suggested (podiatry-relevant), risk factors are identified, educational material is generated and recommendations for prescribed referrals/interventions are presented. The provider can then quickly read this assessment result and place proactive measures in place to manage these risks that could otherwise have caused a future fall. These measures will specifically highlight the most evidenced-based lower extremity interventions for fall risk including: a Balance Brace, balance-enhancing footwear and appropriate physical/occupational therapy prescriptions.

Sample ICD-10 coding report following assessment:

- Muscle weakness, generalized M62.81
- Difficulty in walking R26.2
- Unsteadiness on feet R26.81
- Other abnormalities of gait and mobility R26.89
- Dropfoot, acquired M21.371 (Rt.), M21.372 (Lt.)
- Ataxic gait R26.0

The documentation is quickly and easily placed into the patient's electronic medical record and is stored in the cloud for future retrieval at a later date if necessary. Furthermore, the back-office data analytics capability is one of the most impressive components of the system for use in moderate-to-large organizations and systems.

While this proprietary technology is actively being utilized in its current form all across the United States, updates specifically designed for podiatric practice are being weaved into the program to allow for more foot and ankle-related treatments to be incorporated. Having the ability to create customizable dashboards and reports with predictive analytic capabilities to efficiently allocate resources, fall occurrence can be reduced by greater than 20% each month of implementation. There is no complicated equipment to purchase, no leases, and little to no training involved.

## Summary

The key to being effective in reducing falls is being proactive in anticipating potential complications while

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also validating the use of tools that can enhance the clinical and financial health of your business. Without using the proper metrics and technology to identify risk, fall-related injuries will continue to skyrocket.

Identifying tools to remove the barriers in identifying and treating those at risk for falling can change lives and improve the quality of life for seniors in our practice. Work is going on now to make technology available to podiatric physicians to make performing fall risk assessment not only less complex, but also reimbursable. Orthopedic and podiatric physicians are already using this technology and seeing phenomenal results.<sup>25</sup>

Making our intervention plans patient-centered, focused and committed based on the individual under your care is not a “one size fits all” approach. Falls are multifactorial in their etiology and should be treated as such. Evidence is overwhelming on the importance of using assessments that examine multiple areas of risk as a baseline to mitigate the risks identified. Without the assessment-to-intervention framework, there becomes an element of “guessing” or “hoping” that the specific intervention has a positive effect.<sup>26,27</sup> **PM**

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