

# Bridging the Gap: **Empowering** Podiatric Physicians as Leaders in Fall Prevention

Achieve this through gait assessment and biomechanical management.

BY JONATHAN MOORE DPM, MS, PHD

This article is written exclusively for PM and appears courtesy of the American Academy of Podiatric Practice Management. The AAPPM has a fifty-plus year history of providing its member DPMs with practice management education and resources. Visit www.aappm.org for more information.

alls are among the leading causes of injury and death in the elderly, and gait abnormalities are one of the strongest predictors of fall risk. Podiatric physicians (DPMs), with their in-depth understanding of biomechanics, lower extremity pathology, and functional gait assessment, are uniquely positioned to lead fall prevention initiatives. Yet, despite this alignment of expertise and need, DPMs are often underutilized in this role. This article contends that podiatrists must reclaim their position at the forefront of fall prevention by recognizing their unique skill set, implementing accessible protocols, and collaborating within interdisciplinary teams to enhance patient outcomes while generating sustainable clinical revenue.

# The Problem: Why Aren't DPMs **Leading Fall Prevention?**

While neurologists, geriatricians, and physical therapists are often consulted in fall risk evaluations, DPMs are rarely integrated into standardized fall prevention programs. This omission likely stems from misperceptions about the scope of podiatric care and a lack of familiarity among other providers with the podiatrist's capabilities in gait analysis and biomechanical intervention. Additionally, some DPMs themselves may not realize the potential impact they can make, or they may lack access to streamlined tools for fall risk documentation, assessment, and management.

## **BRIDGE: A Practical Protocol for Podiatric Fall Prevention**

To address this gap, try a structured protocol using the acronym BRIDGE-each element a critical span connecting clinical observation to intervention:

**B**—Balance Assessment: Begin by assessing the patient's balance, either through observation of gait or through a validated tool such as the SafeBalance/Life in Balance system. This can include tests like the Timed Up and Go (TUG), Functional Reach Test, and postural sway analysis. A visual gait assessment may reveal hesitancy, shortened stride, lack of heel strike, or lateral deviation, all of which signal fall risk. SafeBalance/ Life in Balance is reimbursable via CPT 97750 and includes a

built-in plan of care, enhancing documentation and care planning.

**R**—Report Findings and Risk Level: Quantify and document your assessment. Whether using a formal platform or clinical observation, the podiatric physician should report specific risk levels, chart gait deviations, and classify balance impairment. This objectivity creates clarity for referrals and justifies orthotic or therapy interventions. By formalizing risk, DPMs create defensible treatment plans with measurable outcomes.

I—Identify Biomechanical Risk **Factors:** Lower limb deformities, painful or unstable joints, proprioceptive deficits, or sensory neuropathies all impair gait. A 2023 study in the Archives of Physical Medicine and Rehabilitation identified hallux valgus, decreased ankle strength, and reduced toe flexion as significant fall predictors in the elderly (Almeida et al., 2023). DPMs are uniquely trained to identify and address these deficits through comprehensive biomechanical exams.

**D**—Deploy Stabilizing Interventions: Initiate interventions that target the identified deficits. Custom orthoses can offload pain, restore alignment, and improve proprioceptive feedback. AFOs enhance postural stability and mitigate

Continued on page 84



Fall Prevention (from page 83)

ataxia, weakness, and ankle instability in neuropathic or compromised elderly patients. More than mere structural supports, AFOs function as dynamic tools for balance restoration. Research shows that AFOs can significantly improve postural control by reducing mediolateral sway and optimizing the center of mass within the base of support. In patients with neuropathy or muscular weakness, AFOs assist in compensating for impaired ankle strategy—the body's natural use of ankle musculature to maintain upright posture during standing and ambulation

Furthermore, AFOs can enhance proprioceptive feedback from the foot and ankle, allowing patients with diminished sensation to regain a sense of spatial orientation. By stabilizing the ankle joint and promoting more consistent heel strike and toe-off phases of gait, AFOs reduce the risk of stumbling and falling. Their role is thus not only mechanical but neurophysiological, augmenting both structural alignment and sensory integration needed for safe ambulation. Additionally, educate on appropriate footwear that stabilizes the rearfoot and supports toe-off mechanics.

**G**—Guide Targeted Physical Therapy: Refer patients to physical therapists with specific instructions tailored to biomechanical impairments. Studies have shown that targeted PT in neuropathic populations significantly improves functional gait and balance (Evans et al., 2021; Missaoui & Thoumie, 2013). DPMs should be assertive prescribers—outlining therapeutic goals and following up on patient adherence.

**E**—Educate Patients on Fall Prevention Strategies: Education must cover proper footwear (low heel, wide toe box, slip-resistant soles), the impact of pain or instability on fall risk, and the value of adherence to therapy or orthotic use. Additionally, home safety advice (lighting, handrails, removing rugs) supports total-environment prevention.

# **Reframing the BRIDGE Metaphor**

A bridge is a structure that provides safe passage over a gap—an apt metaphor for the podiatric physician's role. Fall risk creates a chasm between autonomy and dependence. BRIDGE offers six planks that span this divide: Balance testing, Reporting, Identification, Deployment, Guidance, and Education. This framework empowers DPMs to serve as structural supports in their patients' lives.

#### **Evidence-Based Support for BRIDGE**

In addition to the cited studies, recent data confirms the biomechanical basis for falls. In ataxic neuropathies, loss of proprioception increases sway and results in cautious, inefficient gait (Missaoui & Thoumie, 2013). Evans et al. (2021) showed that targeted balance programs in neuropathic patients can lead to reduced falls and improved stability. Podiatric physicians are ideally placed to identify these deficits early.

Almeida, et al. (2023) found that lower limb impairments—including decreased ankle dorsiflexion and impaired great toe extension—correlated with higher fall risk. These are directly within the podiatrist's domain to treat or modify. Intervening early can prevent injury, hospitalization, or loss of independence.

#### **Clinical and Economic Value**

Using CPT 97750 and orthotic provision as revenue channels allows DPMs to provide essential services while sustaining their practice. The BRIDGE protocol justifies referrals, enhances documentation, and improves care planning. Patients benefit from customized, biomechanically targeted interventions, improving safety and mobility.

Moreover, the implementation of AFOs and custom orthoses in patients with demonstrated balance deficits has been associated with reduced emergency visits and decreased fall recurrence. These devices are not only preventive but can reduce long-term healthcare costs. By incorporating the BRIDGE model, podiatric physicians can show measurable clinical improvement while supporting practice viability.

### Step Up, Step In

The podiatric physician's unique training and expertise must not go untapped in the fight against falls. With BRIDGE, DPMs are not just observers of gait—they are builders of clinical stability. These six steps move a patient from risk toward resilience. It is time to stop underestimating what podiatrists can do—and for podiatrists themselves to step up. Fall prevention is not an option—it's a duty. Implement BRIDGE. Close the gap. Save lives. PM

#### References

Almeida, Gustavo J. M., et al. Lower Limb Factors Associated with Balance and Falls in Older Women: A Study from the Study of Osteoporotic Fractures (SOF). Archives of Physical Medicine and Rehabilitation 104, no. 2 (2023): 223–230.

Maki BE, Holliday PJ, Topper AK. A prospective study of postural balance and risk of falling in an ambulatory and independent elderly population. J Gerontol 1994; 49: M72-84.

Brauer SG, Burns YR, Galley P. A prospective study of laboratory and clinical measures of postural stability to predict community dwelling fallers. Journals Gerontol—Ser A Biol Sci Med Sci 2000; 55: M469-76.

Neville, Christopher, et al. "Lower-Limb Factors Associated with Balance and Falls in Older Adults: A Systematic Review and Clinical Synthesis." Journal of the American Podiatric Medical Association 110, no. 5 (2020): Article\_21-261. doi:10.7547/19-143.

Evans, Evan R., Amit Batheja, Rebecca S. Heintz, and Amanda S. Gluskin. "Fall and Balance Outcomes After an Interdisciplinary Intervention for Older Adults with Diabetes Mellitus: A Case Series." Journal of the American Podiatric Medical Association 111, no. 2 (2021): Article\_19-192.

Missaoui, B., and P. Thoumie. "Balance Training in Ataxic Neuropathies." Annals of Physical and Rehabilitation Medicine 56, no. 6 (2013): 460–473.

..........



Dr. Jonathan Moore is a board-certified physician nationally and internationally recognized for his expertise across several disciplines, including medical economics, fall prevention, wound care and biomechanics. Moore is the founder and former managing

partner of Cumberland Foot and Ankle Centers of Kentucky, now a division of Upperline Health. Moore has served as a board member and fellow of the AAPPM for over 15 years.