



Embracing aging and empowering adults to move, engage, and live well

June 26, 2019

The Honorable Susan M. Collins
Chairman
Senate Special Committee on Aging
United States Senate
Washington, DC 20510

The Honorable Robert P. Casey
Ranking Member
Senate Special Committee on Aging
United States Senate
Washington, DC 20510

Dear Senators Collins and Casey,

On behalf of our more than 5,500 member physical therapists, physical therapist assistants, and students of physical therapy, the Academy of Geriatric Physical Therapy (AGPT), a component of the American Physical Therapy Association (APTA), appreciates the opportunity to provide comments and recommendations to the Senate Special Committee on Aging as it examines prevention and management of falls and fall-related injuries in preparation of the Committee's annual report.

Physical therapists (PTs) are uniquely qualified to assess the older adult at risk for falls.¹ In 2018, the American Journal of Preventive Medicine published a study of the effectiveness of 7 evidence-based fall interventions.² This study found that even if only one of these was implemented consistently across the eligible population, an estimated \$94 to \$442 million in direct medical costs could be averted annually. Physical therapists are trained to implement these programs, provided patients receive access to physical therapist services at the appropriate time.

Physical therapists are movement experts who utilize exercise, hands-on care, and patient education. After a thorough evaluation, we create personalized treatment plans to address a patient's specific needs, which might include improving mobility, managing pain and/or other chronic conditions, recovering from an injury, and/or preventing future injury and chronic disease. One of the foundations of physical therapy is to empower people to be active participants in their own treatment. The role of physical therapists in falls prevention includes, but is not limited to:

- Assessing risk for falling.
- Designing an individualized plan for a patient's fall-prevention needs.
- Providing home safety assessments and modifications to make a patient's home as safe from fall hazards as possible.
- Education about the risk factors associated with falls and identifying potential mitigation strategies.

¹ Avin, K. G., Hanke, T. A., Kirk-Sanchez, N., McDonough, C. M., Shubert, T. E., Hardage, J., & Hartley, G. (2015). Management of Falls in Community-Dwelling Older Adults: Clinical Guidance Statement From the Academy of Geriatric Physical Therapy of the American Physical Therapy Association. *Physical Therapy*, 95(6), 815-834.

² Stevens, J. A., & Lee, R. (2018). The Potential to Reduce Falls and Avert Costs by Clinically Managing Fall Risk. *American Journal of Preventive Medicine*, 55(3).

- Providing appropriate exercises and balance training.
- Working with other health care professionals to address any underlying medical conditions that could increase fall risk.
- Providing recommendations on evidence-based community programs.

Physical therapists also address the identified deficits following physical examination and objective tests of movement patterns. Physical therapists are a vital component of multifactorial interventions that address modifiable risk factors for falls. Interventions provided by physical therapists are targeted and dosed to provide neural adaptations that improve anticipated and reactive balance strategies under varying conditions.

We appreciate the opportunity to provide recommendations for the public health issue of falls among older adults and we have addressed the topics and questions put forth by the Senate Special Committee on Aging below.

Reporting and Follow-Up

To what extent are falls unreported among older Americans?

Based on data from the 2002 Medicare Current Beneficiaries Survey, Shumway-Cook et al. reported that 48% of beneficiaries talked to their physicians about having fallen, and of those who did, 60% received information about preventing future falls.³

Men are less likely than women to report falls and seek follow up care to improve prevention. Falls are often under-reported due to older adults' having a fear that they will lose their independence.

What strategies can be employed to encourage patients to promptly notify their health care provider or caregivers of a fall?

Recommendation: In collaboration with Community Paramedicine and Emergency Medical Services, older adults who suffer multiple falls or are injured, call 911, but are not transported, would benefit from a multifactorial assessment that includes a physical therapist's assessment. A coverage benefit for an in-home assessment by a physical therapist may help alleviate this issue.⁴

How can follow-up with appropriate healthcare providers be improved after a visit to an emergency department for a fall?

Recommendation: During or after an emergency department visit related to a fall, a visit with a physical therapist should be conducted that includes a complete falls-risk assessment including fear of falling and appropriate referral to follow up care as needed.⁵ The American College of Emergency Physicians has developed Geriatric Emergency Room Guidelines, which can be found at: <https://www.acep.org/by-medical-focus/geriatrics/geriatric-emergency-department-guidelines/>. These evidence-based guidelines provide explicit information on how to best evaluate and treat any older adult who attends the emergency

³ Shumway-Cook, A., Ciol, M. A., Hoffman, J., Dudgeon, B. J., Yorkston, K., & Chan, L. (2009). Falls in the Medicare population: incidence, associated factors, and impact on health care. *Physical Therapy*, 89(4), 324–332.

⁴ Kizer, K. W., Shore, K., & Moulin, A. (2013). Community paramedicine: A promising model for integrating emergency and primary care. *UC Davis*. Retrieved from <https://escholarship.org/uc/item/8jq9c187>.

⁵ Avin, K. G., Hanke, T. A., Kirk-Sanchez, N., McDonough, C. M., Shubert, T. E., Hardage, J., & Hartley, G. (2015). Management of Falls in Community-Dwelling Older Adults: Clinical Guidance Statement From the Academy of Geriatric Physical Therapy of the American Physical Therapy Association. *Physical Therapy*, 95(6), 815-834.

department. The guidelines state, in part, that the standard of care for any older adult who goes to the emergency department should be a fall risk screen, regardless of admission criteria; and, a multi-disciplinary team that includes a physical therapist should assess the patient.

More importantly, a policy for coverage of follow-up after discharge should be considered. For example, a follow up phone call after the emergency department visit would be beneficial to assess the patient's status and ensure they have access to the resources they need. The emergency department is just a snapshot in time of the patient. A covered in-home visit by a physical therapist to assess all of the falls risk factors in the patient's environment which could ultimately be a more effective way to empower the patient to manage their fall risk.⁶

Recommendation: Enact payment policies that promote the delivery of home-based evaluation and exercise programs. Longitudinal studies demonstrate that regular physical exercise extends longevity and reduces the risk of physical disability. Decline in physical activity with aging is associated with a decrease in exercise capacity that predisposes to frailty.⁷ Among the most effective interventions are home-based exercise programs that allow therapists to address both mobility related concerns and home environmental factors that contribute to fall rates.⁸ Home-based interventions are perhaps most critical for frail or cognitively impaired older adults who cannot attend clinic-based services regularly and may represent the only option for skilled care for patients in rural or socioeconomically impoverished areas. Adding physical therapy to the benefit for telehealth services would go a long way to providing frail or cognitively impaired older adults with the follow up and supervision they need to consistently take part in regular activity and exercise.

Tools and Resources

What learning tools, resources or techniques can be used to empower patients to change their home environment or modify risk factors to reduce the risk of falls?

There are several evidence-based programs that are designed specifically to empower patients to modify their risk factors. These programs demonstrated effectiveness in randomized clinical trials including but not limited to: A Matter of Balance, The Otago Exercise Program, Tai Chi for Arthritis, Tai Chi Moving for Better Balance, Stepping On, and Enhanced Fitness, published in a [CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults](#).⁹ The goal of these programs is to give older adults the tools and the confidence they need to manage their risk of falls. These programs need greater support to be disseminated nationally and to be available in both online, virtual, and real time formats. Funding and support for sustainability are barriers for all of these programs viability. A policy (such as lowering monthly Medicare costs) rewarding seniors for attending these programs may be beneficial and facilitate better engagement.

⁶ Olij, B. F., Ophuis, R. H., Polinder, S., Beeck, E. F., Burdorf, A., Panneman, M. J., & Sterke, C. S. (2018). Economic Evaluations of Falls Prevention Programs for Older Adults: A Systematic Review. *Journal of the American Geriatrics Society*, 66(11), 2197-2204.

⁷ Aguirre LE, Villareal DT. Physical Exercise as Therapy for Frailty. *Nestle Nutr Inst Workshop Ser.* 2015;83:83-92

⁸ Liu-Ambrose T, Davis JC, Best JR, et al. Effect of a Home-Based Exercise Program on Subsequent Falls Among Community-Dwelling High-Risk Older Adults After a Fall: A Randomized Clinical Trial *JAMA.* 2019;321(21):2092-2100.

⁹ Stevens JA, Burns ER. *A CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults.* 3rd ed. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2015.

Regarding home safety, the [Centers for Disease Control and Prevention's Stopping Elderly Accidents, Deaths, and Injuries Check for Safety](#) tool allows older adults to assess and address environmental risks.¹⁰ Awareness of this tool would be beneficial.

Stevens and Lee reviewed promoted the importance of Vitamin D to preventing bone loss. It is difficult to estimate how many falls are actually the result of bones that break – e.g. the patient did not trip, misstep or were unable to recover from a loss of balance – but instead fall after their hip (or other bone) broke and they lost support.¹¹ Thoroughly assessing older adults for Vitamin D levels on a regular basis and insuring they receive the appropriate nutrition is essential. This could be promoted through television, print, partnering with the ADA or other groups, as well as community outreach programs.

What are the opportunities and limitations surrounding assistive technologies?

Recommendation: Congress should direct CMS to continue to improve the coding and payment processes for complex rehabilitation and assistive technology. It is critical that the specific products determined to meet the medical needs of Medicare and Medicaid patients be protected in order to prevent injuries and permanent deformities. Home modifications and assistive devices are important components of fall prevention; they consist of any changes made to meet the needs of an individual with a physical limitation and can include assistive technologies or structural changes to a home. According to the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA), home modification should promote accessibility and adaptability.¹²

Low-cost home modifications and repairs can significantly decrease an individual's fall risk when in their home. Common home modifications include adequate lighting, removing unnecessary clutter, obstacles, and throw rugs, ensuring there are hand rails on stairs, limiting visual deception (especially with carpets/stairs), re-arranging kitchen drawers/shelves based on usage, and bathroom modification (non-slippery tub/shower) with appropriate grab bars.¹⁰ Recently, Medicare Advantage programs were given the opportunity to add home modifications as a benefit to their enrollees. However, the beneficiary is required to 'choose' from one of several add-on benefits, such as rides to doctor appointments, having groceries delivered to them, and making home modifications. Beneficiaries shouldn't have to choose which 'one' of these they might receive, and Medicare fee-for-service patients should have access to similar benefits.

Due to the multifactorial components of fall prevention (with the three primary risk factor involving strength, balance, and gait), physical therapists play a key role in helping prevent falls. In addition, there are several technology methods and tools that have been tested or used in falls prevention to allow older adults to age in place, including telehealth monitoring, cameras, gaming-like software for balance exercise, and accelerometer sensors to detect falls. Additional research is needed on the use of information technology in the home on falls prevention and monitoring is needed.¹³

¹⁰ Centers for Disease Control. (2015). *Centers for Disease Control and Prevention National Center for Injury Prevention and Control STEADI Check for Safety Brochure*. Retrieved June 1, 2019, from https://www.cdc.gov/steadi/pdf/check_for_safety_brochure-a.pdf

¹¹ Stevens, J. A., & Lee, R. (2018). The Potential to Reduce Falls and Avert Costs by Clinically Managing Fall Risk. *American Journal of Preventive Medicine*,55(3).

¹² Keall MD, Pierser N, Howden-Chapman P, et al. Home modifications to reduce injuries from falls in the home injury prevention intervention (HIPI) study: a cluster-randomised controlled trial. *Lancet*. 2015;385(9964):231.

¹³ Use of Information Technology for Falls Detection and Prevention in the Elderly. Oladele Ademola Atoyebi & Antony Stewart & June Sampson. *Ageing Int*. 2015;40:277–299.

Are there any federal policy barriers that make it difficult to offer tools and resources to patients to prevent falls?

Yes. Unless an older adult is homebound and qualifies for home care services, it is very challenging for a therapist to conduct a home safety evaluation on a patient in rehab or going to outpatient. This requires travel time that is not reimbursed and takes away from the therapist's availability to treat other patients. Reimbursement practices need to support the costs associated with travel and time away from other patient care for therapists to feasibly conduct evaluations. Medicare does not cover screening and wellness activities. Nor do they cover activities that support behavior change such as phone call follow-ups by physical therapists.

AGPT encourages the Senate Aging Committee to consider how it might expand access to telehealth services, such as telerehabilitation, which has the potential to reduce spending, improve health and wellbeing, and enhance communication between patients and their providers. Many states permit therapy providers to furnish telehealth services, and they do so safely and effectively. Telehealth therapy services may make the difference in preventing falls, functional decline, costly emergency room visits, and hospital admissions/readmissions. Allowing patients to have access to a physical therapist either in-person or remotely can have a dramatic impact on improving care and reducing negative consequences and costs of care. In 2017, the Department of Veterans Affairs (VA) promulgated a final rule to address the current disparities between the delivery of telehealth services and state laws that have inhibited VA's expansion of telehealth services to certain locations. Other government agencies should follow the VA's lead in pursuing broader coverage of telehealth services furnished by health care professionals, including physical therapists.

Recommendation: Add physical therapists as authorized providers of telehealth under Medicare Fee-for-Service (FFS). Under traditional Medicare, physical therapists are not able to provide and bill Medicare FFS for telehealth services furnished to Medicare beneficiaries. Allowing physical therapists to furnish telehealth services to the Medicare population would greatly benefit Medicare beneficiaries by expanding their access to physical therapists, whom they would otherwise have to travel long distances to see. Physical therapists also utilize telehealth to assess patients' environments and identify risks to their treatment and safety. Rather than simulating a patient's home, work, or school environment based on the patient's oral account, physical therapists are able to observe those environments in real time, and witness the way a patient navigates them. Using telehealth to observe patients in their own home, ensuring exercises are being properly performed, allows physical therapists to help patients avoid complications and further injury by identifying risks in the home setting, changes in health status, as well as how patients operate in such settings.¹⁴, all of which could result in reduced rehospitalizations and overall costs of care. This is particularly beneficial to those with chronic conditions, a population that is at risk for falls and other injury. AGPT recommends that Congress modify the Social Security Act 1834(m) to allow physical therapists to furnish and receive payment for covered telehealth services (subject to state law).

Recommendation: Ensure that physical therapists can furnish telehealth services to Medicare Advantage enrollees. Telehealth services are gaining attention at both state and federal levels as more providers, payers, and patients are seeking cost-effective approaches to care. However, existing barriers are prohibitive of these services and the providers who are eligible for reimbursement when providing care

¹⁴ Forkan R, Pumper B, Smyth N, et al. Exercise adherence following physical therapy intervention in older adults with impaired balance. *Phys Ther.* 2006;86(3):401-1.

through telehealth. Currently, physical therapists are not able to bill for telehealth services under the Medicare program. In the 115th Congress, AGPT and APTA supported the CONNECT for Health Act (H.R. 2556/S. 1016), which would lift many of the current restrictions on telehealth services under the Medicare program, including where these services can take place and who can provide telehealth. Specifically, the legislation would allow physical therapists and other providers to use telehealth when treating patients who are enrolled in Medicare Advantage (MA) plans, accountable care organizations (ACOs), and certain bundled payment models. AGPT urges the Congress to include language in any telehealth legislative vehicle considered in the 116th Congress to ensure that physical therapists can use telehealth when treating patients who are enrolled in MA plans and participating in alternative payment models, including ACOs and bundled payment models.

Medicare

How can the "Welcome to Medicare" visit or the "Annual Wellness" visits be improved to better assess fall risk and fracture prevention and ensure appropriate referrals?

Recommendation: Expand the role of physical therapists in the Initial Preventive Physical Examination (IPPE) or "Welcome to Medicare" visit. The IPPE is an introduction to Medicare and covered benefits and focuses on health promotion and disease prevention and detection to help beneficiaries stay well. Currently, Medicare covers an IPPE when performed by a physician (doctor of medicine or osteopathy) or qualified non-physician practitioner (a physician assistant, nurse practitioner, or certified clinical nurse specialist). Physical therapists can play a valuable role in conducting the Welcome to Medicare visit, particularly in the areas of preventive screenings and services. Each of the 7 components of the IPPE are included as part of the physical therapist's evaluation and management of their patients. Through determination of many of the suggested items in the seven action areas, physical therapists could play a role for determining fall risk (e.g., MiniBESTest, FRAST, Four Square Step Test, 10g Semmes-Weinstein monofilament testing) and potential frailty (gait speed and Timed Up and Go [TUG], and grip strength).

Recommendation: Allow for and support an annual mobility/functional wellness visit to a physical therapist so older adults can be regularly screened for impairments in balance, limitations in mobility, cognitive changes, and other factors that may be impacting their function and falls risk.^{15,16} Adding physical therapists as qualified providers to the annual Medicare Wellness visit would have a significant impact on the number of older adults assessed for falls risk. Current policies require a physician to identify a problem or risk and make a referral to a therapist, which the patient may or may not follow up on. A patient having the ability to go directly to therapy or the therapist directly to them to provide these falls risk assessments could save millions of direct medical costs. Annual wellness visits and mobility assessments would also identify deficits early which many people believe are "normal aging."¹⁷

The falls risk screening tool used for the wellness visit needs to be standardized across all practices, and the results from that screen need to be actionable interventions. Medical schools typically have limited

¹⁵ Avin, K. G., Hanke, T. A., Kirk-Sanchez, N., McDonough, C. M., Shubert, T. E., Hardage, J., & Hartley, G. (2015). Management of Falls in Community-Dwelling Older Adults: Clinical Guidance Statement From the Academy of Geriatric Physical Therapy of the American Physical Therapy Association. *Physical Therapy*, 95(6), 815-834.

¹⁶ Montero-Odasso, M., Almeida, Q. J., Bherer, L., Burhan, A. M., Camicioli, R., Doyon, J., . . . Verghese, J. (2018). Consensus on Shared Measures of Mobility and Cognition: From the Canadian Consortium on Neurodegeneration in Aging (CCNA). *The Journals of Gerontology: Series A*, 74(6), 897-909.

¹⁷ ACSM Scientific Pronouncements: Physical Activity Guidelines for Americans. (2019). Retrieved from <https://www.acsm.org/acsm-positions-policy/physical-activity-guidelines-for-americans>.

geriatric content and typically do not specifically teach fall risk screening. For example, The University of North Carolina School of Medicine devotes 6 hours of the 4-year curriculum to Geriatric Care. There is a 2-hour fall screening activity where students can practice screening, but there is limited opportunity to discuss tailored interventions. As a result, older adults who screen positive for fall risk are told they are at risk for falling, but are not given an intervention, so they often will limit their activities because they are now afraid to fall. If providers are doing screening, there must be an education and intervention associated with that screening. Practices must have pre-established partnerships with community-based organizations and other disciplines such as physical therapists to make sure there is appropriate access to these interventions.¹⁸

How can Medicare coverage and reimbursement for falls prevention and fall-related services be improved?

Recommendation: Evolve current Medicare Part B payment to support home safety evaluations and home-based interventions for fall-related injuries that can occur outside the outpatient rehabilitation therapy benefit or home health episodes of care. Increased support for reimbursement of evidence-based falls prevention programs, such as the Otago, would be beneficial to patients in need of fall prevention and fall-related services. The current regulations and fee structure do not allow for a graded exercise program to be spread out over a year.¹⁹ In fact, pending Medicare Part A payment methodology changes for home health agencies (effective January 1, 2020) may decrease access to home care for older adults by reducing the episodic payment when patients begin receiving home health services without a preceding institutional stay. While Medicare Part B covers therapist services furnished in the home, unlike primary care physician services, there is no payment increase to cover the elevated costs of providing care in a patient's home versus a clinic setting.

Recommendation: Tell CMS to fully implement education of both providers and Medicare Administrative Contractors about the settlement and coverage of skilled care. The *Jimmo v. Sebelius* Settlement clarified that Medicare must cover skilled maintenance care in the home health, skilled nursing facility and outpatient therapy settings, the reality is that the Centers for Medicare & Medicaid Services has not been effective or transparent in its education of providers and Medicare Administrative Contractors (MACs). Denials still exist by the MACs, but more importantly providers still "fear" the denials. The Center for Medicare Advocacy, the organization who spearheaded the lawsuit on behalf of Medicare beneficiaries, recently completed a survey of stakeholders to analyze the effectiveness of CMS' education efforts regarding the *Jimmo*. The survey was sent to over 400 providers and advocates across multiple disciplines. There was about a 20% response rate. Of those respondents, almost 40% still had not heard about the *Jimmo* Settlement, and almost 30% remained unaware that Medicare coverage depends on the need for skilled care, regardless of a beneficiary's potential for improvement, and that Medicare covers skilled care to maintain a condition or slow deterioration. Most tellingly, over 70% of respondents were completely unaware of the *Jimmo* Education Campaign that CMS was required to provide in 2013. Further, even some of those were aware did not participate, as over 85% of respondents indicated that they did not participate. CMS materials continue to lag as source of information as well, as over 60% of respondents have not accessed CMS' *Jimmo* webpage.²⁰

¹⁸ Ory, M. G., & Smith, M. L. (2015). Research, practice, and policy perspectives on evidence-based programing for older adults. *Frontiers in Public Health*, 3, 136-145.

¹⁹ Shubert, T. E., Smith, M. L., Ory, M. G., Clarke, C. B., Bomberger, S. A., Roberts, E., & Busby-Whitehead, J. (2015). Translation of the Otago exercise program for adoption and implementation in the United States. *Frontiers in Public Health*, 2, 152.

²⁰ <https://www.medicareadvocacy.org/center-for-medicare-advocacy-survey-cms-jimmo-v-sebelius-improvement-standard-education-still-not-working/>

How are existing Medicaid waivers being utilized for falls prevention and fall-related services? Are there demonstrations or pilot programs that the Center for Medicare and Medicaid Innovation should consider?

Recommendation: In states with direct access, pay for physical therapy assessment and care or community level referral without a physician visit. The ACA includes a provision that encourages the Innovation Center to develop models that promote efficiencies and timely access to outpatient care, such as outpatient physical therapy services, through models that do not require a physician or other health professional to refer the service or be involved in establishing the plan of care for the service, when such service is furnished by a health professional who has the authority to furnish the service under existing state law.

Recommendation: Pay for prevention. Physical activity reduces the risk of fall-related injuries by 32-40% and decrease severe falls requiring medical care. Physical activity also ameliorates functional declines and strength that may occur with aging. Older adults who have suffered a hip fracture or stroke still improve function with physical activity.²¹ Physical activity is effective in reducing falls.²² Guidelines recommend physical activity, resistance training and balance training for ALL older adults; however, only 25% of the population is meeting the guideline.²³ Older adults need guidance to perform appropriate and effective activities safely. Many adults do not know how or where to exercise and need assistance and access.²⁴

Recommendation: Consider whether current Medicare coverage and payment allows for older adults with fragility fracture to participate in physical therapy for the orthopedic conditions and to treat underlying balance and gait disorders (fall prevention).²⁵

Recommendation: Support alternative models of physical therapy care including a model with a combination of individual physical therapy treatment and physical therapy designed and supervised small group exercise classes. A model where physical therapists can continue to follow medically complex patients, keeping them exercising with skilled exercise classes at the right functional level with physical therapy oversight for safety and progression. On discharge the patient can continue with the group exercise, so there is a handoff to the class where they already have been exercising and they have social support. (So rather than covering expensive short-term individual treatment, have a coverage per episode – or something similar to this for a different model). There is strong evidence that shows an individualized multi-component exercise program reduces the risk of falls and frailty among older adults.^{26, 27} Older adults are not exercising for a variety of reasons: physical limitation due to health condition or aging, lack of professional guidance, lack of healthcare provider support, inadequate

²¹ Dipietro, L., Campbell, W. W., Buchner, D. M., Erickson, K. I., Powell, K. E., Bloodgood, B., . . . Olson, R. D. (2019, June 1). Physical Activity, Injurious Falls, and Physical Function in Aging: An Umbrella Review. *Medicine & Science in Sports & Exercise*, 51(6), 1303-1313.

²² Sherrington, C., Whitney, J. C., Lord, S. R., Herbert, R. D., Cumming, R. G., & Close, J. C. (2008). Effective exercise for the prevention of falls: a systematic review and meta-analysis. *Journal of the American Geriatrics Society*, 56(12), 2234-2243.

²³ Blackwell, D. L., & Clarke, T. C. (2018, June). State Variation in Meeting the 2008 Federal Guidelines for Both Aerobic and Muscle-strengthening Activities Through Leisure-time Physical Activity Among Adults Aged 18-64: United States, 2010-2015. *National Health Statistics Report*, (112), 1-22.

²⁴ Physical Activity. (2019, June 21). Retrieved from <https://health.gov/PAGuidelines/>.

QuickStats: Percentage of Adults Aged ≥65 Years Meeting 2008 Federal Guidelines for Leisure-Time Aerobic and Muscle-Strengthening Activities, by Age and Type of Activity — United States, 2000–2002 and 2013–2015. (2016). *MMWR. Morbidity and Mortality Weekly Report*, 65(37), 1019.

²⁵ McDonough, C. M., Colla, C. H., Carmichael, D., Tosteson, A. N., Tosteson, T. D., Bell, J., Bynum, J. P. (2017). Falling Down on the Job: Evaluation and Treatment of Fall Risk Among Older Adults With Upper Extremity Fragility Fractures. *Physical Therapy*, 97(3), 280-289.

²⁶ Aguirre, L. E., & Villareal, D. T. (n.d.). Physical Exercise as Therapy for Frailty. *Nestlé Nutrition Institute Workshop Series Frailty: Pathophysiology, Phenotype and Patient Care*, 83-92.

²⁷ Bethancourt, H. J., Rosenberg, D. E., Beatty, T., & Arterburn, D. E. (2014). Barriers to and Facilitators of Physical Activity Program Use Among Older Adults. *Clinical Medicine & Research*, 12(1-2), 10-20.

information on available programs.²⁰ Even with exercise programs that are free or low cost (Silver Sneakers, Enhance Fitness), older adults are attending in very in very low numbers.²⁰ The most vulnerable people of this population are not utilizing this service. The current medical model of physical therapy consists of short-term treatment and discharge with a home exercise program and/or recommendation to continue with community programs. This model is unable to keep patients healthy largely due to the fact that patients are not exercising at home or in the community.^{20,28,29} Patients must continue to exercise to maintain the gains made in physical therapy. Unfortunately, studies have shown that the gains made by older adults in physical therapy begin to decline anywhere between 1 and 9 months after discharge.^{21, 22, 30} Lack of adherence to the home exercise program on discharge and functional regression leads to repeat incidences of falls, balance concerns, or other declines requiring additional bouts of physical therapy treatment.

Evidence-Based Practices

Are there evidence-based practices that reduce the rate of additional bone fractures among those older Americans who have fallen and broken or fractured bones?

Targeted progressive balance and gait training combined with lower extremity strengthening exercise (e.g., Otago) is effective in reducing fall risk and fall-related injuries by 40-60%.³¹ The rate ratio (95%CI) for falls resulting in fractures was 0.39 (0.22 to 0.66).

Are there regional differences in the utilization of these services, evaluations, or screenings?

Although regional differences were not examined, a study of national Medicare claims found that only 10% of older adults with new upper extremity fragility fracture received evaluation or treatment for fall risk, balance and gait disorders.³²

Are there models (such as the Million Hearts Campaign) for other health conditions that have applicability to reducing the overall rate and impact of falls among the elderly?

Yes. Please see:

- a. The Falls Free Coalition through the National Council on Aging
<https://www.ncoa.org/resources/falls-free-coalition-overview/>.
- b. The Stopping Elderly Accidents, Deaths, and Injuries (STEADI) initiative to improve screenings, assessment, and interventions for falls prevention available at:
<https://www.cdc.gov/steady/index.html>.
- c. National Falls Prevention Awareness Day (National Council on Aging).
<https://www.ncoa.org/healthy-aging/falls-prevention/falls-prevention-awareness-day/>.

²⁸ Forkan, R., Pumper, B., Smyth, N., Wirkkala, H., Ciol, M. A., & Shumway-Cook, A. (2006, March). Exercise adherence following physical therapy intervention in older adults with impaired balance. *Phys Ther.* 2006;86(3):401-1.

²⁹ Vellas, B. J., Wayne, S. J., Romero, L. J., Baumgartner, R. N., & Garry, P. J. (1997). Fear of falling and restriction of mobility in elderly fallers. *Age and Ageing*,26(3), 189-193.

³⁰ Dipietro, L., Campbell, W. W., Buchner, D. M., Erickson, K. I., Powell, K. E., Bloodgood, B., . . . Olson, R. D. (2019, June 1). Physical Activity, Injurious Falls, and Physical Function in Aging: An Umbrella Review. *Medicine & Science in Sports & Exercise*, 51(6), 1303-1313.

³¹ El-Khoury, F., Cassou, B., Charles, M., & Dargent-Molina, P. (2015). The effect of fall prevention exercise programmes on fall induced injuries in community dwelling older adults. *British Journal of Sports Medicine*,49(20), 1348-1348.

³² McDonough, C. M., Colla, C. H., Carmichael, D., Tosteson, A. N., Tosteson, T. D., Bell, J., Bynum, J. P. (2017). Falling Down on the Job: Evaluation and Treatment of Fall Risk Among Older Adults With Upper Extremity Fragility Fractures. *Physical Therapy*,97(3), 280-289.

- d. Royal Osteoporosis Society: Strong, Steady, and Straight.
<https://theros.org.uk/forms/documents/strong-steady-and-straight/>.

Polypharmacy

What recommendations do you have to ensure prescribers take into account the relationship between polypharmacy and falls risk when making both initial and follow-up clinical decisions for high-risk patients?

Polypharmacy and its relationship to falls risk was another area posed by the Committee. We agree that this is an area of high risk, and there is plentiful research to support that someone on 4-6 medications is at increased risk for falls.³³ A medication review is an important part of physical therapists assessment. Physical therapists can collaborate with other health care professionals to manage these issues. For example, a physical therapist will conduct a medication review may find drugs that are contraindicated together, or drugs that flag as high risk when used in combination with each other. In these situations, a physical therapist would contact the physician or nurse practitioner, and alert them to the findings. Many times, they find they are unaware of other medications the patient has been prescribed by another provider.

Recommendation: APTA has previously issued a statement on the role of physical therapists in medication management as related to homecare. As stated by APTA, “It is within the scope of the physical therapist to perform a patient screen in which medication issues are assessed even if the physical therapist does not perform the specific care needed to address the medication issue. The physical therapist is competent and qualified to serve as case manager and facilitate coordination of care with physicians and nurses.”³⁴ Physical therapists have the professional capability and ability to refer to others in the health care system for identified or possible needs that are beyond the scope of physical therapist practice. Accordingly, AGPT strongly recommends that CMS recognize the competence of physical therapists in managing medications and their ability to collaborate with other health care professionals when appropriate and remove this discipline-specific guidance in the Guidelines.

Is there a need for increased research on the link between polypharmacy and falls-related deaths and/or injuries?

Recommendation: Yes. Although there were over 10,000 indexed studies on this subject published since 2014, they show mixed outcomes. One systematic review of 50 comorbidity-adjusted observational studies found that polypharmacy has unclear association with falls and death in community-dwelling older adults.³⁵ Another review (132 studies with 34,143 total participants) found that de-prescribing needed to be part of a patient-specific intervention in order to reduce risk of death and falls.³⁶ Many

³³ Avin, K. G., Hanke, T. A., Kirk-Sanchez, N., McDonough, C. M., Shubert, T. E., Hardage, J., & Hartley, G. (2015). Management of Falls in Community-Dwelling Older Adults: Clinical Guidance Statement From the Academy of Geriatric Physical Therapy of the American Physical Therapy Association. *Physical Therapy*, 95(6), 815-834.

³⁴ https://www.apta.org/uploadedFiles/APTAorg/Payment/Medicare/Coding_and_Billing/Home_Health/Comments/Statement_Medicament_Management_102610.pdf

³⁵ Fried, T. R., O'leary, J., Towle, V., Goldstein, M. K., Trentalange, M., & Martin, D. K. (2014). Health Outcomes Associated with Polypharmacy in Community-Dwelling Older Adults: A Systematic Review. *Journal of the American Geriatrics Society*, 62(12), 2261-2272.

³⁶ Page, A. T., Clifford, R. M., Potter, K., Schwartz, D., & Etherton-Beer, C. D. (2016). The feasibility and effect of deprescribing in older adults on mortality and health: A systematic review and meta-analysis. *British Journal of Clinical Pharmacology*, 82(3), 583-623.

medications in the Beers criteria do carry increased fall risk as a side effect, so future research should target specific, multi-component interventions related to polypharmacy and associated fall/mortality risk.

There is a significant need to assess polypharmacy for many reasons that impact morbidity and mortality as well as wellbeing. Specific to falls, we need to find how to educate providers better about too many medications, reimburse for time for geriatricians to regularly review medications (and to have more geriatricians practicing) or support with other health care providers such as physical therapists to review medications for possible contributions and make recommendations for de-prescribing.

Transitions of Care

How can the transitional period from a hospital or skilled nursing facility to the home be improved in assessing the home for fall risks?

Recommendation: The transitional period following an admission to the acute care hospital or skilled nursing facility to address a fall-related injury or fracture should include a follow-up visit to the home by a physical therapist. The Stevens/Lee study demonstrated that home hazards are another risk or contributing factor.³⁷ Home assessments and exercise interventions initiated early after an initial fall are most likely to reduce rates of a second fall, and will help to restore lost functional ability and mobility. Among the most effective interventions are home-based exercise programs that allow therapists to address both mobility related concerns and home environmental factors that contribute to fall rates.³ Home-based interventions are perhaps most critical for frail or cognitively impaired older adults who cannot attend clinic-based services regularly and may represent the only option for skilled care for patients in rural or socioeconomically impoverished areas.

Home safety evaluations are the most cost-effective means of falls prevention.³⁸ Older adults would benefit from receiving a home safety evaluation after a transition of care, considering their functional abilities often decline after hospitalization or a skilled nursing home stay. This is most easily supported through home care services; however, undertaking this is a barrier if the home safety evaluation is not allowed if an individual is not deemed homebound. An additional barrier to home safety modifications includes coverage for items such as grab bars in the bathroom and hand rails on stairs. The cost-benefit ratio of covering these modifications compared to cost of an older adult suffering a fall is well-documented.³³

What more could be done by government agencies to support fall risk assessments and the implementation of protocols that could be used to prevent falls in the home care population?

Recommendation: Require public and private payers to cover an annual fall risk evaluation by a physical therapist for older adults. Such a program would be aligned with the CDC recommendation of home safety evaluation as part of the STEADI guidelines for fall prevention. Moreover, government agencies could support fall risk assessments and protocols to prevent falls by promoting policies to increase community access to preventive services by making services available in convenient community settings,

³⁷ Stevens, J. A., & Lee, R. (2018). The Potential to Reduce Falls and Avert Costs by Clinically Managing Fall Risk. *American Journal of Preventive Medicine*,55(3).

³⁸ Olij, B. F., Ophuis, R. H., Polinder, S., Beeck, E. F., Burdorf, A., Panneman, M. J., & Sterke, C. S. (2018). Economic Evaluations of Falls Prevention Programs for Older Adults: A Systematic Review. *Journal of the American Geriatrics Society*,66(11), 2197-2204.

maximizing the use of telehealth and other technologies, and building awareness of preventive services through social and web media.

Post-Fracture Care

Are there best practice models that can provide implementation opportunities?

There is evidence of effectiveness of physical therapists' interventions, and implementation tools ([Centers for Disease Control and Prevention Stopping Elderly Accidents, Deaths, and Injuries](#)).

Are there any federal policy barriers to implementing best practices in post-fracture care?

Recommendation: Provide regulatory relief to time or treatment duration limitations of post-fracture care, and permit variable delivery models. Patients who have suffered a fracture will benefit from short-term rehabilitation to get them home and functioning, but are likely to need more rehabilitation when their fractures and muscles have healed enough to allow more targeted exercise interventions.³⁹ Follow-up or variable visits (outside a normal plan of care) would allow programs such as the Otago to be utilized more effectively and patients post-fracture to be followed out to a year.^{40,41}

Conclusion

The Academy of Geriatric Physical Therapy commends the Committee for its leadership on examining prevention and management of falls and fall-related injuries. We look forward to the Committee's annual report. Thank you for considering our comments and recommendations. If you have any questions or would like additional information, please do not hesitate to contact me at g.hartley@med.miami.edu.

Thank you for your consideration.

Sincerely,



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President

³⁹ Mahran DG, Farouk O, Ismail MA, Alaa MM, Eisa A, Ragab II Effectiveness of home based intervention program in reducing mortality of hip fracture patients: A non-randomized controlled trial. *Arch Gerontol Geriatr.* 2019 Mar - Apr;81:8-17. Epub 2018 Nov 16.

⁴⁰ Lima, C. A., Sherrington, C., Guaraldo, A., Moraes, S. A., Varanda, R. D., Melo, J. A., ... Perracini, M. (2016). Effectiveness of a physical exercise intervention program in improving functional mobility in older adults after hip fracture in later stage rehabilitation: protocol of a randomized clinical trial (REATIVE Study). *BMC Geriatrics*, 16(1), 198.

⁴¹ Mahran, D. G., Farouk, O., Ismail, M. A., Alaa, M. M., Eisa, A., & Ragab, I. I. (2019). Effectiveness of home based intervention program in reducing mortality of hip fracture patients: A non-randomized controlled trial. *Archives of Gerontology and Geriatrics*, 81, 8-17.