

GeriNotes



APTA Geriatrics.

An Academy of the American
Physical Therapy Association

Age on.™

Gerinotes

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From the President



Cathy Ciolek
President,
APTA Geriatrics

As the summer peaks and, hopefully, COVID-19 ebbs, I hope you were able to enjoy some time with family and friends. The limited in-person contact with other humans in the past 18 months has been challenging for everyone. We hope this fall and winter going into 2022 will allow more in-person events to celebrate the APTA Centennial. APTA encourages members to celebrate the centennial this fall by giving back to their communities via the [100](#)

[days of service](#). This event coincidentally kicks off on September 22, which also coincides with National Falls Prevention Awareness Day.

Did you know that of the 700,000 emergency department visits for people over 65 in 2018, nearly [92% of those were due to unintentional falls](#)? The next highest cause was automobile accidents at 7.8%. With those statistics the CDC has launched the “[Still Going Strong](#)” campaign to help older adults learn how they can age without injury. This site offers resources for ageing adults, caregivers, and healthcare providers. There are videos, social media images, and materials that you can make available for your practice, patients, or clients. If you live in Maine, Oklahoma, Oregon, or Wisconsin, look for targeted ads from the CDC specifically for these states.

The Balance and Falls Special Interest Group (BFSIG) has invested hours of work into 2 tools that you can use to address the issue of reducing preventable falls. First is a [toolkit of outcome measures](#) with information categorized by setting with details related to ideal population, psychometric property, and fall predictability. If you are using September 22 (or any date!) to host a falls screening clinic, you can download the updated [National Falls](#)

[Prevention Awareness Day Toolkit](#) that contains information on how to host a screening, recruitment letters, sponsorship information, workflow design for the event, liability release, power point presentations, screening tools, and handouts. It is, literally, everything you need to know and have to run a screening clinic for the community. Thank you to the teams of volunteers who put these together and continue to update them to meet member needs!

These are all to reduce falls. There has also been an incredible team working on how to help ageing adults

APTA encourages members to celebrate the centennial this fall by giving back to their communities via the 100 days of service. This event coincidentally kicks off on September 22, which also coincides with National Falls Prevention Awareness Day.

who experience hip fracture. APTA Geriatrics partnered with the Academy of Orthopaedic Physical Therapy to develop [Physical Therapy Management for Older Adults With Hip Fracture](#) a clinical practice guideline published in *JOSPT* but provided by open access to all PTs and PTAs. This multi-year project provides clinical practice recommendations for examination and intervention across the entire episode of care. It offers specific recommendations for acute, post-acute inpatient, and home/community settings. Thank you to all the authors but special thanks to APTA Geriatrics members’ Christine McDonough and Kathleen Kline Mangione. Your work will help to elevate physical therapist care for people with hip fracture for years to come.

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Questions for APTA Geriatrics leaders and staff can be submitted to geriatrics@geriatricspt.org.

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From the Editor



Michele Stanley
Editor,
GeriNotes

I've long been a fan of the Otago exercise program for outpatients and home health clients alike. It is simple, easy for people to understand, non-painful to participate in, and part of a body of impressive research on fall risk reduction. The program is effective to reduce falls and fall-related injuries among individuals at high risk, particularly adults over 80 years of age and those who have fallen within the past year. It also turns out to be a program method that is exceptionally adjustable to multiple settings and delivery methods.

In the May 2021 issue *GeriNotes*, we published a novel study using the Otago as a group exercise method in a SNF with good results (read Tiffany Shubert's invited commentary on page ___ in this issue). This month features an Otago telehealth delivery program complete with included resources and a guide that was thoughtfully constructed by physical therapy students at the University of Vermont [HUGE kudos to instructor Lee Karlsson PT, DPT, MScPH and faculty Nancy Gell PT, PhD, MPH]. Like using Otago groups in skilled nursing homes, this is another "read about today, use in the clinical setting tomorrow" idea that is free for the steal for *GeriNotes* readers.

With Fall prevention month just around the bend and the likelihood that we won't be seeing the end of COVID-19 restrictions/hesitancy in the immediate future, consider this idea for a program that can be started safely and inexpensively to promote "Still Going Strong."

I live in Wisconsin, a state where weather related cancellations are very common by ageing clients. Instead of continually taking the "hit" to your production by late cancellations, could you have a fall risk reduction program that encourages your patient to continue their balance work under your guidance with a telehealth program that is set up and ready to go?

With Fall prevention month just around the bend and the likelihood that we won't be seeing the end of COVID-19 restrictions/hesitancy in the immediate future, consider starting an Otago telehealth delivery program.

This issue of *GeriNotes* continues our mission to spotlight and celebrate fellow therapists who have blazed their own trail in creating alternative practices that work for them. Many of you are likely already somewhat familiar with the Facebook group called *GEROS Community* moderated by Dr. Dustin Jones PT, DPT. Dustin shares his private practice and philosophy in this month's invited feature on interesting physical therapy practices. Make sure that you check out GEROS when you are perusing our own [APTA Geriatrics Facebook Discussion Group](#).



Register for the free **Journal Club** discussion webinars and earn 1.5 contact hours. Questions for presenters may be emailed to gerinoteseditor@gmail.com before or on the day of the webinar. See what's coming up at <https://geriatricspt.org/events/webinars/>.

GeriNotes

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Mission: To provide engaging content that empowers the community of physical therapy clinicians to build expertise and expand the delivery of evidence-informed care that promotes health and wellness in ageing adults.

Vision: To create an evolving online community through which clinicians develop their knowledge and skills based in shared ideals that are person-centered; and promote a world where ageing adults move, live, and age well.

Presenting the Candidates for the 2021 Election

The nominating committees of APTA Geriatrics present to the membership the following list of candidates for the 2021 election. Please review the candidates in preparation for the election that will be held in October 2021 and feel free to reach out to them should you have any questions.

Presented in alphabetical order, using [APTA's Appropriate Use of Designations](#).

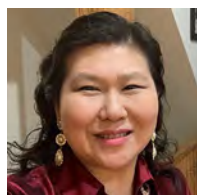
Board of Directors: Treasurer



Pradeep Rapalli, PT, DPT, MBA

It is a great honor to be considered for the role of Treasurer of APTA Geriatrics. I strongly believe in implementation in addition to planning for achieving success. I have a vast array of experiences in roles such as clinician, educator,

volunteer, and a mentor in the physical therapy profession. My budgeting and money management skills are well appreciated in the organizations I have worked. My business degree, accounting skills, and familiarity with the financial analysis of nonprofit organizations add a great strength to the same. APTA Geriatrics has a vision that we are all working toward. However, for an organization to thrive and succeed, managing different metrics such as proper budgeting, auditing, and reconciling the funds is also very essential. It takes the full support system including people who pay attention to every detail for achieving success and operating smoothly. I am highly confident that I have those necessary skills to support our executive team, as well as members in general. My past experiences and education will give me an edge over others to be qualified for the role of Treasurer. I look forward to this journey of contributing to the Academy and being a part of its success.



Elizabeth Wang-Hsu, PT, PhD

I have been a clinician for over 25 years. I received my PhD from Drexel University in 2015. I have devoted the past decades of my professional life to the outcome measure toolkit, fall prevention assessments, and evidence-based interventions. I have been a member of APTA since 1996.

I have served as the Research Liaison and the Chair of the Outcome Measure Toolkit Project of the Balance & Falls Special Interest Group of American Physical Therapy Association Geriatrics. I have spoken in national and international conferences. I am a passionate person and a lifelong learner. I will do my best to support and advocate for APTA Geriatrics. Your vote is greatly appreciated!

Board of Directors: Director



Tiffany Hilton, PT, PhD

I am excited for the opportunity to be considered for the position of Director. My passion, organization, and attention to detail are important qualities that will help me to be successful in the role of Director. I began working with APTA

Geriatrics in 2012 as Section Program Co-Chair. In this role, I developed an appreciation for the needs of our members and the programming priorities of the Academy and how they related to the broader APTA organization. Based on my experience as a section program chair, I was selected to be on the APTA Combined Sections Meeting Steering Group. I have also been Awards Committee Chair for APTA Geriatrics for three years. This role is very rewarding as I enjoy the opportunity to review all of the nominations and to celebrate our wonderful and deserving members! I am currently an Associate Professor and the Assistant Program Director and the Director of Curriculum in the Doctor of Physical Therapy Division at Duke University School of Medicine. In this role, I have gained valuable experience with strategic planning, improved my communication, and learned to navigate the delicate balance between the big picture and the details of our program. I also oversee the policy review process for the Doctoral Division of Physical Therapy. Through these experiences, I believe I have the vision, communication, emotional intelligence, and understanding of issues facing our profession, to be an effective leader who represents the needs of our Academy.



Kenneth L Miller, PT, DPT

Serving the membership on the APTA Geriatrics Board of Directors and overseeing practice has been a great honor for me these past 2 years. I wish to continue my service as a servant leader to achieve the outcomes of becoming a

trusted resource to our patients, profession, and society. My most dear passion is to actively listen to members and be a voice advocating wherever possible for the value of geriatric physical therapy to our patients and society at large. I would love to see coverage and access for an annual well visit that demonstrates true value in terms of health promotion, disease prevention, and disease management that focuses on patient-centered, holistic care

with optimal outcomes. As director of practice, I would like to see our Academy create knowledge translation resources to help drive the initiation and sustainability of best practices. I would like to see expansion of Academy programming to help more PTs realize their dreams of becoming geriatric clinical specialists. Lastly, with your vote, I will work tirelessly to represent you, ensure the members of our society have access to physical therapy services, and for these services to be respected and valued by all stakeholders.



Michael Puthoff, PT, PhD

I am excited to be considered for a Board of Directors position. I have served APTA Geriatrics through the Exercise and Physical Activity and Aging Conference I and II Steering Committees, presentations at CSM,

publishing in JGPT, and most recently a task to create an Annual Visit for Aging Adults. I have also been involved at the state and district level for APTA Iowa. I am a faculty member at St. Ambrose University and currently serve as the program director. I have additional administrative experience as the former Dean of Graduate Studies. I want to do more and now is the time. Through my work, in addition to my service to the community, I believe I have the experience, knowledge of issues facing our profession, and passion to be an effective leader in our organization. My vision for APTA Geriatrics is that we continue to reframe aging as a gift and that our members have a duty to support a meaningful aging experience. This means working at the person level, but also at the societal level. As a Director, I want to help lead efforts such as these and contribute to the work already being done.



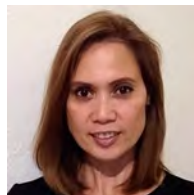
Jennifer L. Vincenzo, PT, MPH, PhD

I am an Associate Professor in the Department of Physical Therapy at the University of Arkansas for Medical Sciences and a Board Certified Geriatric Clinical Specialist in Physical Therapy with over 20 years of experience. I

also conduct research in falls prevention. I have served in numerous roles in APTA Geriatrics that qualify me to serve on the Board of Directors. I serve as the Arkansas State Advocate for APTA Geriatrics and as the current Chair of the Balance and Falls Special Interest Group (BFSIG). Under my tenure, and with a very talented group of members, the BFSIG produced a Falls Prevention Toolkit and an Outcomes Measures Toolkit as well as other products to support falls prevention. I serve on the APTA Geriatrics/National Council on Aging Task Force as one of the research leads, contribute to the *Journal of Geriatric Physical Therapy* and *GeriNotes*, and helped craft the Senate Special Committee on Aging Falls Prevention response. I also serve on other national and state councils. I have a passion for serving our profession and older

adults. I would appreciate the opportunity to serve on the Board of Directors to facilitate APTA Geriatrics' growth in line with the strategic framework.

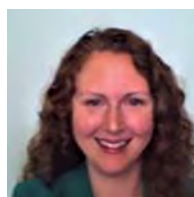
Nominating Committee: Member



Carmina Lagarejos Rafael, PT, DPT

I am excited to serve! As a seasoned physical therapist with a strong background in Geriatrics and well-rounded exposures with experiences of various PT cases in multiple settings, I am confident that I am able to enhance our

PT profession in Geriatrics specialty through collaboration of skills, leadership, service, passion, and dedication. With my 25+ years as a physical therapist, 17+ years with geriatric focus and 9+ years of being Board-Certified Specialist in Geriatric PT and Certified Exercise Expert for Aging Adults, I am teeming with ideas and energy to put in motion and propel APTA Geriatrics as our trusted resource in lifelong learning and advocacy in the physical therapy profession serving the geriatric community. Working with colleagues and students alike, my aim is to elevate the Geriatric PT profession. My current volunteer involvement in APTA Geriatric committees and local chapter FPTA has given me tremendous opportunities to contribute, as well as be aware of rooms for further growth. I am looking forward to passionately serving our PT profession, in advancing our skills, training and professional advancement through various platforms, and in benefiting the Geriatric population, embracing aging and empowering adults to move, engage, and live well!



Tara Maroney, PT, DPT

Thank you for this opportunity. I am honored and excited to be considered for this position. I graduated from Sacred Heart University's Doctor of Physical Therapy Program and completed the Jewish Senior Services Geriatric Residency Program. I am a Board-Certified Clinical Specialist in Geriatric Physical Therapy, a Certified Exercise Expert for Aging Adults, LSVT BIG Certified, and a 200-hour Registered Yoga Teacher. I work full time as an Assistant Professor at American International College in Springfield, Massachusetts. My teaching focus includes geriatric and neuromuscular patient management and health promotion and wellness. I spent most of my clinical career working in inpatient rehabilitation facilities and currently have per diem hours at DopaFit, a health and wellness gym that is designed for individuals with Parkinson's Disease. I serve as the Western District Delegate, Western District Assembly Representative and Geriatric Special Interest Group Vice Chair for APTA Massachusetts and I am an American Board of Physical Therapy Residency and Fellowship Education Onsite Reviewer. In the past,

I have served as the creator and Co-Chair of the APTA Connecticut New Professional Special Interest Group, member of the NEXT Planning Committee (Co-Chair in 2019), and Western District Chief Assembly Representative and Delegate-at-Large for APTA Massachusetts. I was awarded the APTA Emerging Leadership Award in 2017. My goal as a Nominating Committee member would be to help encourage the best qualified candidates to serve in leadership roles to support APTA Geriatrics' mission, vision, values, and strategic outcomes. In order to reach my goal, inclusivity, collaboration, and creative outreach will be key. It is my hope that you will entrust me to be part of the team that helps build our leadership community to advance the profession of physical therapy to optimize the aging experience.



Amy Walters, PT

I have been a physical therapist for over 20 years and a physical therapy educator for seven years. I currently teach geriatric physical therapy and pharmacology at the University of St. Augustine. I have spent the last 3 years building

relationships and partnerships in the Austin community with geriatric PT students and many agencies catering to older adults. My passion is creating physical therapy students who advocate for our older adults and appreciate the need to partner with community organizations to provide holistic care for our older adults. I think it is time we focused on more innovative and creative ways to care for older adults.

Balance and Falls SIG: Chair



Alona Fernandez, PT, BSPT

Board-Certified Clinical Specialist in Geriatric Physical Therapy, Certified Wound Specialist, Wound Care Certified, Resident Assessment Coordinator Certified

I am seeking your support that I may be given the opportunity to take part in the leadership role for Geriatric Fall and Balance Intervention. If given said opportunity, I pledge to advocate for the health and well-being of the elderly population in order to promote meaning and quality in their lives.



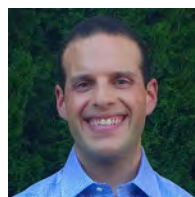
Heidi Moyer, PT, DPT

Board-Certified Clinical Specialist in Geriatric Physical Therapy

My front-line work with the APTA Geriatrics Balance and Falls Special Interest Group (BFSIG) over the last 5 years provides me with a unique pulse on the past, present, and future of the energy and needs of the BFSIG members. In my time as Clinical Liaison (2016-2018), I created the Monthly Challenge as well as worked with the chair at the time to restructure the

leadership framework to include more diverse viewpoints in decision-making. I was also able to serve as secretary (2019-2021), during which time I created the Balance and Falls Biweekly Blurb, as well as served pivotal roles in the development of both the Outcome Measures and the National Falls Prevention Awareness Day Toolkits. We have experienced marvelous growth as a unit thanks to the countless efforts from our amazing volunteers. I am so proud of the BFSIG. Should I be elected, I intend to work toward continued growth, as well as sustainability of the BFSIG efforts, including consistent mentoring of our volunteers, continuing to serve as a trusted resource by providing new clinical toolkits, fostering lifelong learning by creating continuing education content, as well as many more ideas to promote quality care for the older adult patient.

Balance and Falls SIG: Vice Chair



Haim D. Nesser, PT, DPT

During my tenure as Clinical Liaison, State Advocate and Programming Committee member for APTA Geriatrics, I have worked to promote evidence-based practice, professional engagement, and professional development

for clinicians and students alike. I created user-friendly content for older adults to promote health and wellness and falls safety promotion. As a Clinical Liaison of the Balance and Falls Special Interest Group (BFSIG), I expanded the Monthly Challenge, nearly tripling the membership while mentoring others to continue growing the program. As Chair for Falls Prevention Awareness Toolkit Taskforce, we created a first-of-its-kind publication for APTA Geriatrics. I was humbled to receive the 2020 President's Award for Exceptional Contributions to APTA Geriatrics for my efforts on the project. Finally, I served on the Outcome Measures Toolkit Task Force, which I co-presented on at the CSM in 2020. In all, I have been a strong contributor toward each pillar of our organization's Strategic Plan: Providing Trusted Resources, Promoting Lifelong Learning and Advocacy. With the support of my peers and APTA Geriatrics, I have and will continue to expand my efforts to help fulfill our Strategic Plan, while advancing our profession for the present and future. I respectfully ask for your vote.



Stephen O'Brien, PT, DPT

I will support the committee and the association by providing time, knowledge, and skills to achieve the association's goals.



Pooja Pratik Mehta, PT

Board-Certified Clinical Specialist in Geriatric Physical Therapy

I will strive to advocate for improving patient care and mentorship programs by contributing toward and supporting outreach programs; understand barriers and gaps in geriatric care and help problem solve; and enhance student learning via current research and journal clubs.

Balance and Falls SIG: Secretary



Melissa Allen, PT, DPT, PhD

The strong desire to positively impact the lives of older adults and their families is what led me to a career in physical therapy. For the past 14 years, I have served older adults and the physical therapy profession as a clinician and DPT educator, and now I would like the opportunity to work alongside like-minded colleagues to further the mission and vision of APTA Geriatrics. As primary care providers, physical therapists should be on the forefront of holistic care and collaboration with other professionals to best meet the unique (and often complex) needs of this population. We must transition beyond a reactive approach to rehabilitation and emphasize proactive, preventive services and holistic wellness that will allow the older adults in our communities to maximize their quality of life with an emphasis on aging in place. My desire is for the perception of aging among professionals, students, and the community at large to shift from that of frailty and decline to an image of vibrancy and experiencing all of the fullness that life has to offer at all stages. I am proud to be a member of such a dynamic Academy of professionals and would love the opportunity to serve.



Holly Brook Bennett, PT, DPT

As an early professional clinician with various achievements, including being the first Student Liaison, and current Early Professional Liaison for the APTA Geriatrics Balance and Falls Special Interest Group, I have gained the experience and mentorship to contribute to the BSIG as the Secretary. In my prior roles, I promoted clinically relevant tools for use of balance and falls management for student members as well as strived to increase student engagement within the field of geriatrics. I developed and disseminated a student/early career newsletter to members and promoted involvement through social media. I have been a contributor for APTA Geriatrics National Falls Prevention Awareness Day (NFPAD) Toolkit by collaborating with the BFSIG Clinical Liaison to develop the "Student Involvement Letter Template" to recruit healthcare

professional students to participate in a NFPAD Event. Having the opportunity to be Secretary for the BFSIG will enable me to advocate for the community of older adults that I am passionate in working with and advocate for increasing engagement of early career professionals. As a physical therapist, I strive to further my growth with opportunities that expand my knowledge within the geriatric population for application in my profession.



Beth Castellini, PT

My name is Beth Castellini, and I would be honored to be your Secretary for the Balance and Falls SIG. This position aligns well with my core values of balance, fairness, passion, responsibility, and respect – values that led to my co-advocate and I being recognized in February 2021 as the APTA Geriatrics State Advocates of the Year for our efforts on behalf of Geriatric Advocacy in Colorado. I graduated from Texas Woman's University in 1988, and I currently work as the inpatient physical therapist at the VA Medical Center in Grand Junction, CO, covering acute and post acute caseloads. I have actively participated with falls management in a variety of roles: consultant on utilization review committees in SNF and hospice settings, guest lecturer for A Matter of Balance classes, and as a Rehab Representative for a Root Cause Analysis committee. As a clinician as well as a CI for DPT students, I promote best practices including high intensity functional resistance training models, utilize multiple evidenced-based balance and gait speed objective measures in my patient evaluations. Every day, I disseminate this information with my patients and other medical providers to expand their understanding of our data to improve patient outcomes, because I believe in this program to my core. It is everything I've spent my 32-year career working toward and I hope you'll consider me for the secretary position.



Alicia Lynn Illis, PT, DPT

I feel I am a good fit for the Secretary position of the Balance and Falls SIG as I feel I have appropriate experience and leadership skills for the job. I am currently working in a skilled nursing facility and long term care residence home in New Jersey. Prior to this, I was the 2019-2020 Geriatric Physical Therapy Resident at the Durham VA Medical Center. I am working toward furthering my career by pursuing my GCS and CEEAA. I am a confident leader, highly organized, and am easy to work with. During my graduate schooling I was VP of Operations of my sorority and was responsible for many duties including taking weekly meeting minutes and organizing events and ensuring attendance. I feel I can work toward raising awareness about geriatric PT and improving member advocacy as I am currently convincing administrative staff

at my job in allowing our rehab team to create wellness programs with residents of the assisted living and nursing home units. I understand the need for lifelong learning as APTA Geriatrics is a resource I consistently turn to when attempting to find more information in practice areas that I am lacking.

Bone Health SIG: Vice Chair



Kathlene Camp, PT, DPT

I would be honored to serve and support the strategic goals of APTA Geriatrics. I have been privileged to receive a Health Resources and Services Administration (HRSA) Geriatric Academic Award Grant which gives me the opportunity to

explore, create, and implement interprofessional health-care improvement and interprofessional educational opportunities to improve osteoporosis prevention and management. I would like to engage and collaborate with like-minded individuals as I continue on this journey of integrating physical therapy services into primary care for bone health. I strive to continue to learn from experts in the field, across several disciplines, to explore ways to increase awareness for the value of collaboration to integrate a multifactorial approach to bone health care. I have been active in both researching current evidence and preparing to disseminate personal efforts to translate evidence into practice. My goal is to both enhance current practice and prepare future healthcare providers to provide comprehensive and targeted intervention to prevent fractures and improve age-friendly, quality healthcare.



Christine Salmon, PT, DPT

If I am selected for this position, I will support the leadership team in meeting the missions, vision, and values to enhance geriatric physical therapy practice, education, and advocacy.



Anand Vyas, MS, DPT

Board-Certified Clinical Specialist in Geriatric Physical Therapy

I believe working for the BHSIG, can not only be helpful to the Academy, but also help me to increase my knowledge. I have worked in the home health setting for the past 10 years and have enjoyed it even more after receiving my CEEAA and GCS. Certainly, the Academy has helped my practice a lot by increasing my knowledge in geriatric rehab. My main reason for running for this position is that I want to be connected and associated with the Academy and give back for helping me grow professionally. I would like to assist in any way I can. Together, we can provide a lot to the community in the coming years by changing the guidelines of geriatric rehabilitation; providing more resources, information and guidance;

improving the geriatric population's over-all well-being; and, certainly, improving geriatric physical therapists' ability, knowledge, and confidence.

Bone Health SIG: Secretary



Cynthia Barros, PT, DPT

I have been an active member of APTA since PT school, where I discovered my joy for working with older adults. After working toward becoming a Board-Certified Clinical Specialist in Geriatric Physical Therapy I assisted in starting

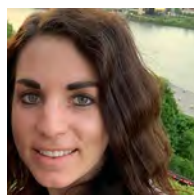
a Geriatric Residency PT program at my workplace, and currently serve as program co-coordinator. I am currently involved in the state level APTA, in Florida, as a part of the Geriatrics SIG, and am excited in furthering my participation in APTA. I believe my strengths of timeliness, and open, clear, and effective communication will provide a solid foundation to hone my leadership skills, passionately promote successful aging for the older adult, and serve my fellow colleagues in the physical therapy profession.



Andrew Bartlett, PT, PhD, MPA

If elected to serve within APTA Geriatrics, I will uphold its values of being person-centered, striving for results, driving for positive change, and working collaboratively with numerous partners.

Specifically, I will consistently strive, not only to advocate for the best quality of care for older adults, but for physical therapists, physical therapist assistants and other health care providers servicing older adults. My service to the Academy will center around the APTA Geriatric Framework of being a trusted resource, lifelong learner, and an advocate to the Academy. Thank you for your consideration.



Olivia Ramsey, PT, DPT

I have spent the first 6 years of my career not only seeking additional education and experience with my preferred patient population, but also learning from and becoming attached to the wonderful individuals I have the

opportunity to work with every day when I go to "work." There is nothing more rewarding to me than hearing the heartfelt appreciation from the patient or the caregivers who love the patient when they understand why they become fatigued or exhausted with their loved one as they age. You truly have unlimited opportunities to leave every person you find better than when you found them.

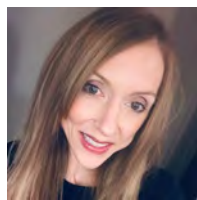
Cognitive and Mental Health SIG: Chair



Alexandra Alexander, PT, DPT

Board-Certified Clinical Specialist in Geriatric Physical Therapy

I feel I would be valuable in this position as I believe the cognitive and mental health aspect of patient care is under-utilized and needs to be advocated for, especially for patients who cannot advocate for themselves. I would love to see more resources for clinicians to help in that aspect of their practice and advance the skills and knowledge of peers within the geriatric realm. I would like APTA Geriatrics to be a trusted resource for all peers. I have been on the New Partnership Taskforce and would love to add to the leadership of APTA Geriatrics as it has guided me through my career thus far. I have also contributed to *GeriNotes* which has helped to promote lifelong learning for myself and peers in my specialty field.



Tiara Stingley, PT, DPT

As a clinician with 12 years experience in Geriatrics, I am a dedicated learner and clinical programmer. I continually work to expand my knowledge base and skill set through continued education, networking with peers, and helping

teams build stronger programs. I have spent a great deal of time as a regional manager, providing resources and training to my teams to ensure the best outcomes for our seniors. My involvement as a state advocate has given me a platform to network and outreach to garner increased participation in the state, along with my Co-State Advocate. My passion and love for our elders drives me to always learn more, be better, and look for new ways of providing better care. Simply put, I love my profession and striving to be better and more for our seniors.

Health Promotion and Wellness SIG: Chair



Frances E. Kistner, PT, PhD

I am excited at the opportunity to serve and support APTA Geriatrics. I am a physical therapist who has a passion for working with older adults. I have worked with the geriatric population for many years and have utilized a variety of non-

traditional methods to facilitate movement and recovery, such as tapping into my past as an Arthur Murray dance instructor. I believe movement is key for physical and cognitive health, and I strongly believe that, as PTs, we have great skills and opportunities to empower adults to move, engage, and live well while we optimize their experience of aging. It is critical that we share our knowledge and experiences, and expertise gained from CEEAA, LSVT and other quality resources with adults of all ages. I believe in empowering others to be their own best self, to prevent

injuries, and to stay active and independent as much as possible. I hope to always be able to encourage others to be healthy and active long into their golden years.



Cathy Stucker, PT, DSc, CMPT

Board-Certified Clinical Specialist in Geriatric Physical Therapy, Certified Exercise Expert for Aging Adults

The opportunity to further my involvement with APTA Geriatrics to advance the profession of physical therapy seems a natural step for me at this point in my career. Over my 29 years as a physical therapist, my accumulated experiences have shaped my passion and commitment to the aging adult population with a special focus on health and wellness. The last 7 years have been a wonderful opportunity to teach bright, enthusiastic students in a DPT program about the amazing need and opportunities to advance health and wellness in the aging adult population. I am happy to say we have managed to get some graduates to join us in the quest! I have had over 15 years in the area of geriatrics in various settings, with my most recent in homecare. I continue to provide patient care alongside my research and academic responsibilities because of the richness that older adults bring to my life, my teaching, and my personal drive. I hope to further increase this reach on a national level through the opportunity to be involved with and learn from the leadership of APTA Geriatrics.



*Watch your email for the electronic ballot this October and **please vote.** Newly elected officers take office at the close of CSM. As per APTA Geriatrics bylaws, only PT and PTA members are eligible to vote. More details to come as the election approaches.*



Building Self-Efficacy with the Barbell

by Dustin Jones, PT, DPT and Jeff Musgrave, PT, DPT

What happens when you show someone what they're capable of doing?

- "I never thought I could do that!"
- "I'm stronger than I realized!"
- "I can now pick up the heavy bag of dog food!"
- "I haven't been able to do that in decades!"

These comments are not uncommon at StrongerLife in Lexington, KY. StrongerLife is a fitness community founded by buddies Dustin Jones PT, DPT and Jeff Musgrave PT, DPT for people 50+ to get strong and achieve things they thought were impossible. StrongerLife, blending business models of physical therapy with strength and conditioning, provides group fitness classes and personal training. There is specific emphasis on attracting individuals with chronic medical conditions or musculoskeletal issues. The following recounts these authors' story and experiences:

Most of our members are 65+ and come to us concerned, nervous, and, often, recently discharged from physical therapy. They know they need to get stronger but they're very intimidated to start and concerned about getting injured.

Many of these people could be considered to have low self-efficacy related to exercise. Self-efficacy is the belief one has in one's capabilities to successfully carry out a course of action.¹ Low self-efficacy related to exercise has been linked to poor exercise adherence and can lead to lower physical activity levels.^{1,2}

When we reflect on what's been the most impactful variable in changing people's lives with low self-efficacy,

it has been using the barbell to apply load. We know applying load has tremendous implications for physical health.^{3,4} Yet, what we're seeing is that by progressively applying load over time with equipment that is often reserved for the "young," we're impacting our members' self-efficacy just as much as their strength. We're helping people realize what they're capable of doing and thus improving self-efficacy.

StrongerLife operates within the context of fitness, yet there are similar trends in the context of physical therapy. We will discuss how we introduce and progress load within the first visit to build our members' self-efficacy. As you read this, consider how some of these things can be applied to your caseload in your particular setting.



StrongerLife members being introduced to the shoulder press with the PVC Pipe.

Introducing Load

All of our new members learn the basic lifts like a deadlift, squat, and shoulder press with a PVC pipe. We start them here to build their confidence by getting numerous successful reps. Using the PVC pipe also builds confidence in their coaches by giving them something that they're capable of doing. One of the quickest ways to lose trust is asking someone to do something that they're not capable of doing.

Coaches focus on giving very selective, simple, externally-based cues while celebrating successful reps. Coaches are also careful to provide only one cue at a time. It is very easy to provide multiple cues for a member to consider. In our experience, this can quickly become overwhelming and make it more difficult to execute the task at hand. One cue at a time gives the member the ability to focus on the desired result which can increase their odds of success. Externally focused cues can also increase their odds of success at the desired task.⁵ Coaches deliberately celebrate successful reps as opposed to consistently making our members aware of what they're doing "wrong." Positive feedback may increase their confidence and potentially positively impact their adherence.⁶

Progressing Load

As the PVC pipe warm up continues, members progress to practicing with an unloaded barbell that weighs 15 pounds. This progression is based on coach observation and the appearance of any symptoms. This is important: it allows members to be in the driver's seat of progression. They're able to progress in a manner that's respectful of any [pain] symptoms they may have.

As load is added to the barbell, we encourage small incremental increases to continue to promote early success and confidence. Despite growing confidence, many individuals at this point still experience a major discrepancy between the perception of their ability and the reality of their ability. The vast majority of individuals are actually capable of doing much more than they perceive. One of the best ways to highlight this and reduce the discrepancy of perception and reality is by using an AMRAP set. AMRAP is short for As Many Reps As Possible and can be leveraged at the end of a working set.

Here's a common example. We often do 5 sets of 5

repetitions with different lifts. The goal is that we build load to where those sets of 5 are at an intensity of 7-8/10 RPE (Rating of Perceived Exertion) which equates to only being able to do 2-3 repetitions beyond 5. However, on the fifth set, we advise our athletes to do As Many Reps As Possible. We often find that our newer members will do 15-20 repetitions with a weight they thought they could only do for 5 repetitions. This is a powerful moment. It tells members that they are capable of more than they perceived. It tells the coaches that the member can lift more weight. It also gives us the opportunity to calculate an estimated 1 Rep Max (1RM) if they performed ≤ 10 reps.⁴ We can then take that information and properly dose our next session.

When that particular movement comes up again in our programming, we encourage our members to view their previous performance within our software. We do this for 2 main reasons: 1) it will allow them to properly dose that workout and 2) it will demonstrate their progress over time. There are few things more powerful than being able to see tangible progress in a particular lift.

Celebrating Load

On that first visit, new members have likely set a new personal record (PR) at a particular lift. At the end of the visit we, as a community, celebrate these victories together by ringing the "PR bell." In this moment, the coach and other members in class recognize their accomplishment by clapping and cheering. It's a powerful moment that often involves some dancing, fist bumps, a high-five, or even a socially distant air-five. Our members experience a shattering of their current view of themselves and see a new, much stronger, more capable person emerge!

Beyond the PR Bell, we also celebrate victories in our virtual community group. Every Wednesday, we prompt the members to share their "Wednesday Win." A "Wednesday Win" is any personal victory in or out of the gym. This is a public way to share victories and continues to create the camaraderie of the community which keeps people coming. Here are some great examples of our Wednesday Wins:

- "I have asthma but now I can tackle multiple flights of stairs without a break!"
- "I recently had a fall but remembered HOW to fall so I didn't get injured!"
- "I don't have any more knee pain!"



A StrongerLife member celebrating a personal record by ringing the PR Bell.

- “I changed my bed sheets for the first time in years without back pain!”
 - “I can lift my body-weight for reps in the deadlift!”
 - “I can now carry the 80 lb. bag of dog food, solo.”
- Intentionally taking the time to celebrate together keeps everyone encouraged and can even show newer members what’s possible with consistency.

In Conclusion

Once we’ve introduced, progressed, and celebrated load with our members, their perception of themselves has completely changed. What once was impossible is now within reach. What they thought they’d never be able to do is now an easy effort. The body they thought was unable to change is now showing improvement and progress. This can be done in fitness. This can also be done in physical therapy with or without the barbell.

In conclusion, we encourage you to consider these questions within the context of your setting and your caseload:

- Are there ways you can thoughtfully introduce load to quickly build trust and confidence?
- How can you progress load while managing symptoms and reducing the discrepancy between your patients’ perceptions and reality?
- Are there creative ways you can celebrate your patients’ victories in and out of therapy?
- How can you create supportive communities in the context of your particular setting?

If you can find answers to those questions, every client that you work with will be grateful!

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Jeff Musgrave is the co-owner of StrongerlifeHQ.com and serves as a teaching assistant with the Institute of Clinical Excellence in the live course Modern Management of the Older Adult. Jeff is also an outpatient physical therapist at The Lexington Clinic, in Lexington, KY. The lack of community fitness resources available to people after discharge and understanding that patients need to continue a regimen of evidence-based exercise to continue to make progress, led Jeff to join Dustin Jones in creating StrongerLife. Jeff coaches at this fitness community several times per week while continuing to serve patients in a traditional outpatient setting.

Dustin Jones is on faculty with the Institute of Clinical Excellence and co-owner of StrongerLifeHQ.com. He has experience in outpatient orthopedics, skilled nursing, and in home health. His experiences across these settings made clear that many older adults were being underserved in physical therapy. This led to the creation of the first geriatric physical therapy podcast, the Senior Rehab Project, that focused on creating resources for clinicians to better serve their patients. The Senior Rehab Project has evolved into the #GeriOnICE podcast and the GEROS Community Facebook Group which includes thousands of clinicians across the globe. These endeavors have fueled his passion to teach others which now includes being on faculty with the Institute of Clinical Excellence in the older adult division alongside Christina Prevett, PT, PhD.



Commentary: Application of the OTAGO Exercise/Fall Prevention Program in the Long-Term Care Setting

by Tiffany Shubert, PT, PhD

Congratulations to Dr. Ecsedy, Dr. Hudlikar and Ms. Depner for the publication of “Application of the Otago Exercise/Fall Prevention Program in the Long-Term Care Setting”, published in the May 2021 issue of *GeriNotes*. This study is an excellent example of how the physical therapy profession should be innovating in care delivery to maximize patient outcomes. The authors may receive feedback that they did not implement the Otago Exercise Program (OEP) with fidelity. Given their thoughtful implementation model and their impressive results, I would argue this is not the case.

Many evidence-based health promotion programs such as Matter Of Balance, the Chronic Disease Self-Management Program, and Stepping On are grounded in theories of behavior change and are designed to be delivered by a “lay leader” (not a healthcare professional). These programs need to be delivered in a very specific, scripted way to maintain fidelity to the program. The OEP is also an evidence-based program; however the fidelity requirements are different. There is not a formal behavior change element in the program, no script to follow. The program works if the individual receives the appropriate type, intensity, and dose of exercise (Shubert, TE). Doing the exercises, not necessarily the delivery and the setting, is what I would argue is the fidelity requirement of the OEP. The authors have demonstrated that by keeping fidelity to the exercise intervention, this population demonstrated similar or even better outcomes than in the original OEP research.

In the May 2021 issue of *GeriNotes* I proposed key ingredients for a successful implementation of the OEP. These ingredients were all integrated into this project.

Ingredient 1 - “Grounded in the principles of exercise science”

The authors developed a standard program to ensure the participants engaged in 45-60 minutes sessions of OEP exercises 3 times a week. Within those sessions the authors had the opportunity to monitor and progress each participant. They incorporated walking as part of the exercise session. More important, they engaged the appropriate participants to promote walking with— either without supervision or integrated into their daily routine. The program design met the requirements of the OEP - 3 sessions of approximately 30 minutes of strength and balance a week and 3 sessions of up to 30 minutes of walking three times a week. I want to highlight by offering this program to residents, the authors may have had an

impact not only on patients but on the interdisciplinary teams. I have been in several situations where our fellow team members in LTC observe their residents participating in an exercise program that it is safe, fun, and challenging. They see residents exercising in standing and see them getting stronger. This often results in facility-wide support of opportunities to promote more walking and movement.

Ingredient 2 – Self-efficacy and Ownership of Health

Given the typical clinical presentation of a patient in long term care, it is not reasonable or feasible to expect all patients to be able to participate independently in a home exercise program. In addition, these patients often benefit from the clinical expertise of a PT or PTA to ensure exercises are performed at appropriate intensity. This provides the time for the patient to safely improve their strength, endurance, and confidence to engage in exercises independently. I commend the authors for recognizing this fact and offering the OEP in a format that was tailored to the needs of this patient population. It was offered consistently, supervised, and for a long enough duration that participants would experience improvements in strength and balance and start to “own” their program.

Ingredient 3 – Fidelity to Key Components

The key component of the OEP is the exercise prescription. This means delivering the OEP exercises plus a walking program at a frequency of 6 sessions a week, at an intensity that challenges the patient. The authors clearly delivered the OEP exercise prescription as intended and created a program that standardized the delivery with fidelity, ensuring the participants were able to receive the appropriate dose of exercise.

And guess what? It worked! The data for the 63 participants who engaged in the program for 6 months clearly shows that participation in the OEP program, as a group intervention in a LTC environment, results in improvements in functional outcome measures and fewer falls. I have a feeling that there were also outcomes that were not measured – such as patient self-efficacy, patient and family satisfaction, and staff satisfaction will have an even greater impact in the overall culture of these facilities. Offering these types of programs will ultimately demonstrate significant value to all stakeholders in this space.

I look forward to future findings from these authors. I would like to see an analysis comparing falls rates at the individual level versus the group level. This will inform which type of patients are receiving the greatest benefits and which type patients may require additional therapy before participating. It also would be good to collect cost effectiveness data of the program to ensure resources are in place to bring these types of program to scale.

Looking forward to seeing more of these types of programs implemented by our colleagues in the future!

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Dr. Tiffany Shubert has been one of the leaders in dissemination of the Otago Exercise Program. She has received funding from the CDC and NIH to study OEP implementation models and is passionate about translating research into practical clinical interventions. She has over 25 publications in peer-reviewed journals and has presented on topics from community-based to clinical

management of falls at national and international meetings. As a founding member and leader of the AGPT/NCOA task force she has lead the development of content and resources to support clinical-community connections. In her current role as a Senior Product Manager of Therapy at Relias she is able to purse her passion to provide excellent clinical education for PTs and PTAs practicing in the post-acute care space to make the world a better place for older adults. She has a B.A. in Communication from UC San Diego, a Master's in Physical Therapy from UC San Francisco, and a Ph.D. in Movement Science from UNC Chapel Hill.



APTA Geriatrics Journal Club

Want more clinical practice-ready stories and tips to integrate in your practice? Want to be part of a cutting-edge knowledge-translation Journal Club integrating research articles from our award-winning *Journal of Geriatric Physical Therapy* paired with clinical tips from expert practicing physical therapists published in *GeriNotes* and discussed in a free for members webinar? Join the discussion. AgeOn!



APTA Geriatrics Learning Center

The APTA Geriatrics Learning Center currently has 15 Home Study Courses in its library.

Look for the following courses to be added in August.

The Application of Statistics in the Clinical Setting for the Management of the Older Adult Patient

*Colin Phillips PT, DPT
Gregory Marchetti, PT, PhD, CPE*

Chronic Pain, Opiates, and Physical Therapy: Considerations for the Older Adult

*Kenneth L Miller, PT, DPT
Sarah Wenger, PT, DPT, FNAP
Yein Lee, DO, MMS, FAAPMR*

Fees:

- APTA Geriatrics Member: \$108
- APTA Member: \$120
- Non-Member: \$200

Home Study Courses are just one aspect of the new APTA Geriatrics Learning Center. Find these courses, webinars, certification programs, resources and more.

<https://geriatrics-learningcenter.apta.org/>

Embracing Telehealth Changes to Deliver the Otago Exercise Program for Fall Prevention

by Lee Karlsson, PT, DPT, MScPH; Daniel Barry, SPT; Astrida Griswold, SPT; Carolyn Snell, SPT; Sadie Thompson, SPT; and Nancy Gell, PT, PhD, MPH

The year 2020 brought many telehealth policy changes at the national, state, and payer level spurred by the COVID-19 pandemic. These policy changes present an opportunity to more flexibly implement clinical fall prevention programs, including the Otago Exercise Program (OEP), through telehealth. The OEP is a personalized balance and strength fall prevention program that is delivered by a physical therapist (PT) over 52 weeks.¹ Originally developed by researchers at the University of Otago in New Zealand, the OEP has since been modified and adapted by the National Centers for Injury Prevention and Control (NCPIC) for use in the United States. Certification is available online for U.S. clinicians through the Center for Aging and Health and the University of North Carolina School of Medicine.² The program is effective to reduce falls and fall-related injuries among individuals at high risk, particularly adults over 80 years of age and those who have fallen within the past year. The OEP has been shown to reduce falls by 35% in these populations.¹ The program is typically delivered through a combination of in-person and telephone visits with the initial evaluation, first few visits, and re-evaluations occurring in the patient's home and subsequent follow-ups taking place by phone. Home and phone visits, as originally designed, can be a potential barrier to implementation under traditional clinic-based fee-for-service models of outpatient physical therapy care.

Many national and state emergency orders, originating or retroactive to March 2020, enable PTs to provide services via a telehealth platform. In particular, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act)³ and Centers for Medicare and Medicaid Services (CMS) waivers⁴ allowed for the use of telehealth including video and audio with some exceptions for telephone. Such mixed care delivery methods increased the flexibility for OEP program implementations when many other insurance payors adopted the waivers.

Current Procedural Terminology (CPT) codes eligible to be billed via telehealth include: Evaluations of Low, Moderate, or High Complexity (97161- 97163), Re-Evaluations (97164), Therapeutic Exercise (97110), Neuromuscular Re-Education (97112), Gait (97116), Therapeutic Activities (97530), and Self Care (97535). Additionally, many payers allow for the use of telephone evaluation and management services (G2061, G2062, G2063). Medicare also allows Self Care (97535) to be delivered via telephone

call. Patients may be located in any geographic area, not just those designated as rural, in any health care facility, or in their home.

These policy and telehealth changes allowed changes in delivery of health promotion learning experiences for DPT students at the University of Vermont as well. The pandemic forced a format shift from traditional in-person student-paired community experiences with practicing clinicians to online projects that could reach beyond local community. Led by community partner Lee Karlsson, PT, DPT, MScPH and faculty Nancy Gell, PT, PhD, MPH, students sought to create a resource that could provide guidance on how to continue the OEP through telehealth, allowing older adults in need of fall prevention to continue rehabilitation even if they were quarantined in their homes. While some guidance had been offered,^{5,6} no comprehensive resource existed for how to navigate the quickly changing realm of telehealth. To address this need, students compiled resources gathered by their community partner to provide an all-in-one package for delivering the OEP via telehealth.

This OEP telehealth resource includes 2 documents: one for clinicians delivering the program and the other for patients receiving it. Prior to document assembly, students interviewed practicing clinicians to determine needs, concerns, and fears about leading a fall prevention program online. These findings informed the clinician resource which begins with a brief introduction for a telehealth format of the OEP. Guidance on completing evaluations, reevaluations, and follow-up visits, including billing codes approved for use with telehealth during each stage of the program is outlined. The clinician resource includes an updated Visit Chart which includes meeting types and references billing information options for telehealth. An appendix includes online resources for exercise demonstrations, exercise calendars, and useful links to guide patients.

The participant resource is designed as a guide for patients who are unfamiliar with the Otago Exercise Program and/or the use of telehealth services. Similar to the clinician resource, the participant version was informed by findings from interviews between the students and older adults at risk for falls. The guide contains an introduction to the OEP and numerous program resources, including hyperlinks to a comprehensive exercise booklet with pictures and written descriptions of each exercise,

video links to watch each exercise being performed, a detailed exercise calendar, and more. The participant guide also contains an introduction to telehealth (What is it? What do the new telehealth policy changes mean for patients?), and tips to ensure a successful telehealth visit.

Readers who wish to access the clinician or patient OEP telehealth resource documents developed by the University of Vermont DPT students may find them here:

- [Click here to access OEP Provider Resource](#)
- [Click here to access OEP Participant Resource](#)

Based on clinician judgement, the OEP can be delivered in-person, as a hybrid in-person and video/phone call, or fully telehealth. The program can be tailored, depending on the needs and expectations of the patient participant. Once a participant has been screened and assessed for fall risk, the PT can determine the optimal method to deliver the OEP. The first visit includes a general patient history and patient education regarding the Otago Exercise Program and why it is beneficial. Day 1 focuses on a functional assessment of balance, strength, and walking ability, followed by the program exercise prescription that is appropriate based on the functional assessment, as well as introduction of a walking program. Throughout the entire length of the program, the PT assesses progress and adherence, and may adjust the plan as needed.

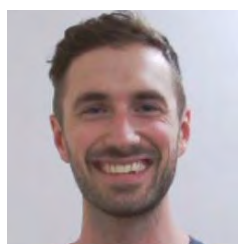
Telehealth policy and implementation developments have enabled flexibility in clinician-patient decision-making regarding physical therapy delivery format. Changing national, state, and payer policies may impact continued care. The American Physical Therapy Association (APTA) has advocated for telehealth services since prior to the COVID-19 pandemic. Continuing multi-level support for telehealth delivery will benefit flexibility in providing care to vulnerable populations, such as older adults at risk for falls. Continued development of treatment resources like the University of Vermont DPT student clinician and patient OEP telehealth resource documents will improve accessibility and quality of care.

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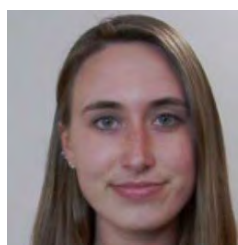
Lee Karlsson is a physical therapist and researcher. She graduated from the University of Vermont DPT Program in 2019 and served as the community partner during the Spring 2021 semester for the group of 4 students completing their Health Promotion coursework project on transitioning the Otago Exercise Program to telehealth. (lee.h.karlsson@gmail.com)



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Carolyn Snell is a third-year DPT student at the University of Vermont with an interest in fall prevention and geriatric care. She has prior experience contributing to research on outcomes of telehealth exercise in patients with breast cancer. (cesnell@uvm.edu)



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Nancy Gell is an Associate Professor in the Department of Rehabilitation and Movement Science at The University of Vermont. She teaches Health Promotion for Physical Therapists and conducts research related to physical activity promotion and fall prevention. (nancy.gell@med.uvm.edu)



Use of Smartphone Technology to Promote Knowledge of Home Safety

by Bonnie L. Rogulj, PT, DPT

There exists a recent surge in the use of technology resulting from the COVID-19 global pandemic experience. Increased demand for delivery of tele-rehabilitation services has become a primary source of motivation for incorporation of technology by healthcare providers into patient/client management and higher education. Current and future healthcare providers are exercising adaptive thinking skills and implementing creative methods to utilize technology and overcome extraordinary challenges.

Dr. Deborah Ruediger, Assistant Professor for the Master of Occupational Therapy (MOT) and Doctor of Occupational Therapy (OTD) programs at the University of St. Augustine for Health Sciences (USAHS), recognizes the importance of integrating technology for creative rehabilitation interventions and professional development. Presently, Dr. Ruediger is pursuing a Doctor of Philosophy (PhD) degree in Education Technology and Design at Walden University. She is eager to share her passion and advanced knowledge of both technology and rehabilitation. Dr. Ruediger created an innovative activity to promote home safety education for community-dwelling older adults incorporating smartphone technology.

Smartphone technology is utilized to capture a 360-degree image of a home environment. The 360-degree content shot is then analyzed by an occupational or physical therapist and an older community-dwelling adult to examine the image for safety hazards commonly located in a home environment. Examples of home safety hazards identified in the smartphone 360-degree image of a home environment may include (but are not limited

to) poor lighting, clutter (e.g., pet toys) scattered on pathways, and throw rugs. Healthcare providers can educate participants/clients regarding the fall risks revealed in the smartphone panorama image. The goal is to improve understanding of home safety with concrete examples relative to an elder's specific situation, further reduce the older adult's risk of falling, and promote overall health and wellness.

Dr. Ruediger enhanced the 360-degree smartphone image by using technology to position "hot spots" on identified home safety hazards. The "hot spot" to be identified reveals additional insight related to the targeted home hazard. The advanced "hot spot" image can be shared with an older adult using technology such as a personal smartphone, tablet, or computer to assess knowledge related to home safety.

Recently, an advanced "hot spot" smartphone 360-degree image was shared with Cindy Greene, a community-dwelling older adult residing in Virginia. Following review of the image, Greene reported "I thought of thresholds located in doorways that may cause a fall, low-set furniture that is difficult to get out of, and toys belonging to grandchildren requiring an older adult to bend low and forward to pick-up." Additionally, she was able to demonstrate an increased awareness of home safety by providing additional home safety recommendations, including "A non-skid mat in the kitchen, lighting for improved visibility, non-skid grip applied to slippery stairs, an organizer for toys, and a handrail that an older adult can actually fit their hand around and grip."

Jordan Lewis, a licensed physical therapist assistant located in northern Florida, was inspired by the possibility of using the 360-degree smartphone image. She created multiple images in the home environment of a community-dwelling older adult female who had fallen 3 times over the course of a month. Jordan stated, "The smartphone images better enabled me to communicate with this person about specific safety measures found within her home. For example, we were able to address and reposition multiple dog beds that were revealed in common walkways and presented as a potential safety hazard. The 360-degree smartphone imaging and discussion led to the incorporation of LED lighting in her kitchen to provide improved visibility for medication management".

This specialized smartphone image of a home environment has been utilized for professional development and student programs. Students enrolled in the Flex Doctor of Physical Therapy program at the University of St. Augustine for Health Sciences (USAHS) were instructed to create a 360-degree smartphone image of a home environment and identify the safety hazards. The future healthcare providers were then encouraged to exercise adaptive thinking skills by considering how smartphone

technology can further become an educational tool for future ageing patients through the delivery of telerehabilitation services.

The global pandemic has prompted a recent surge in tele-rehabilitation. Current and future healthcare professionals must continue to overcome extraordinary challenges, seek creative methods for delivery of services, and utilize technology for healthcare advancement by exercising adaptive thinking skills.




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4 Communication Steps to Complete a Thorough and Efficient Evaluation

by Morgan Nolte, PT, DPT

Every therapist has been there. In your first session with a patient you try to get the information you need and build rapport without being pushy or having the visit take longer than necessary.

There have been times in an evaluation where one minute I'm taking vital signs, the next we are talking about my patient's cat that died, and the next we are talking about her new medications. In the back of my mind I'm overwhelmed thinking about the discombobulated interview and how long I'll have to spend on this paperwork. This is a recipe for burnout. There is a better way.

When you witness a clinician complete an evaluation efficiently and effectively, you can sense there is a skill there. But it's hard to quantify; it's not something we typically learn about in our formal education and training. Communication is a skill. One that expert clinicians work tirelessly to develop and improve.

This article will give you 4 tips that you can use in any session, especially evaluations or start of care, to move through the interview process seamlessly. You can learn to avoid getting sidetracked 20 times talking about their cats, preferences, complaints, or other things that in general, require a lot of cognitive task shifting and redirecting from you.

These strategies work best with people who have mild to no cognitive impairment; they also can help caregivers stay on track during an evaluation.

Step 1: Do Your Homework

Have you ever started an evaluation with an open ended question like, "So, Mrs. Smith, tell me a little bit about what happened and why I am here." While you may be expecting a short and concise answer, what you get is a 15-minute response full of information that's not pertinent. Or perhaps you get an unhelpful response like, "I don't know. You tell me."

What I've found to be more effective both at building rapport and getting the specific answers I need to complete an evaluation, is to do a thorough review of the chart ahead of time. This doesn't need to take excessively long. Have a good idea of the reason for referral, history of illness, comorbidities, precautions, and medications.

Knowing this information ahead of time will reduce the overall number of questions you need to ask, leaving more time for true rapport building and clinical assessment. Think of the situation from your client's shoes. Do they really want to tell their whole story again? They most

likely are thinking, "Isn't this information already in my record? Why are you asking me again? Didn't you prepare?"

While I value each person's perspective of their situation, starting with an open-ended question like, "Tell me a little bit about why I'm here" is often too broad for a productive answer.

The quality of your questions will determine the quality of your results. I'll give you the script I use later in this article for how to compassionately seek to understand the patient's experience while simultaneously showing them you're prepared to keep you both on task.

There have been times in an evaluation where one minute I'm taking vital signs, the next we are talking about my patient's cat that died, and the next we are talking about her new medications. In the back of my mind I'm overwhelmed thinking about the discombobulated interview and how long I'll have to spend on this paperwork.

Step 2: Show Up Like a Professional

Being a therapist automatically makes you a leader. Clients expect the same level of professionalism they receive from primary care physicians at clinics and hospitals.

While this may seem trivial, people will make a first impression of you within 7 seconds of meeting you. Seven seconds. Those first 7 seconds often include very few words but are formed on appearances and non-verbal communication. Here's a quick checklist to get started on the best foot with a patient and their caregivers.

1. **Be on time.** I know this is easier said than done. Depending on your setting, you may not even have scheduled times to see patients. But if you do, be on time. If you're not able to be on time, let them know when they can expect you.
2. **Be "on stage."** There have been days in my clinical

practice where I've felt like a chicken running around with my head cut off. There have been days where nothing seems to be going right. But to the best of your ability, do not bring that energy into the initial encounter. They deserve your best and will respect you more if you don't complain or make excuses for your lack of energy, disheveled appearance, disorganization, or slow computer.

3. **Be courteous and kind.** Most of the adults that we treat grew up in an age where it was disrespectful to call someone by their first name. Most of our patients have been through hospitals and rehab centers where common courtesies such as knocking and waiting permission before entering may be overlooked. I like using their surname for the initial greeting. Then ask them what they prefer to be called. In a situation where they are in control of so little, that gives them a little control back. Along with these general courtesies, a smile can go a long way, even behind a mask.

Step 3: Pre-frame the Session

If you don't have a plan going into the patient encounter, you can bet the session will likely be dominated by unproductive time. People are looking for clinicians to make them feel seen and heard. To most successfully do this, you'll need to create a communication plan. More importantly, you'll need to clearly outline your plan to the patient.

Pre-framing is a technique used to get someone to see a situation from a specific viewpoint. It helps you and the patient have a "shared mental model" as one of my PT professors used to say.

If you haven't yet accepted your role as a salesperson, now is the time. You are selling your plan of care to the client. You need them to buy-in and follow-through for optimal outcomes. Knowing the best tests and interventions does nothing if the patient doesn't buy in and follow-through on your teaching.

With reimbursement models changing and visit frequency decreasing, developing strong patient engagement and self-accountability strategies will be vital for good outcomes.

When it comes to pre-framing an evaluation, here are the key components I include:

Part 1: Who I am and why I'm there. Again, this may sound trivial, but it's an often-overlooked step. You know who you are and why you're there, but they don't.

"Hi Mrs. Smith. I'm Morgan. I'm the physical therapist doing your evaluation today. May I call you Mary or do you prefer another name?"

Part 2: What they can expect. This is an example of pre-framing for a home care start of care. Based on your personal flow and setting, yours may sound different. The point is to have a planned flow; communicate this first thing in your session.

"Thanks for letting me come today, Mrs. Smith. I want

to let you know what you can expect from today's evaluation. This visit should be about an hour long. We will start with talking about your recent (surgery/illness/insert reasons for referral), and your goals for therapy. Then I'll do a physical assessment and review your medications. We'll finish up by creating your therapy plan, reviewing some paperwork, and getting consent forms signed. What question do you have for me that I can be sure to answer for you today?"

Asking this specific open-ended question at the end of the pre-framing allows them to be heard right away. It also allows you to tuck their questions into the appropriate spot during your evaluation to minimize interruptions.

Step 4: Use Signposting & Reflective Listening

Imagine your evaluation as a road trip with your patient across a few counties. Think of a signpost: "Entering Lincoln County." You've covered everything you need to

Being a therapist automatically makes you a leader. Clients expect the same level of professionalism they receive from primary care physicians at clinics and hospitals.

in the previous county and you're on to the next topic or assessment piece. If you break down the pre-framing example from above, you'll notice there are a few distinct sections to the evaluation flow. Each of these sections is a different signpost to keep both myself and my patient, on the same page (in the same county) throughout the evaluation.

From the previous example:

Signpost #1: We will start with talking about your recent (surgery/illness/insert reasons for referral), and your goals for therapy.

Signpost #2: Then I'll do a physical assessment.

Signpost #3: And review your medications.

Signpost #4: We'll finish up by discussing the best plan for your therapy.

Signpost #5: Reviewing some paperwork.

Signpost #6: Getting consent forms signed.

Each of these signposts is like a county. As we leave one and enter the next, I'll communicate that accordingly and often give the patient a chance to ask questions.

For example, to start the first signpost I'd say something like:

"Mrs. Smith let's get started with talking about your recent (surgery/illness/reason for referral) and get a sense for your goals. Before I came here today, I took some time to prepare by reviewing the medical paperwork we received from rehab/the hospital, so I have a good idea about your case. I'd like to review what the paper-

work said, get your perspective if something is wrong, or you want to add anything. From what I read, I saw that you had a fall on 6/4/21 and went to the hospital. They did surgery on your hip and then you went to rehab for a couple of weeks. You got home yesterday and are allowed to put as much weight as you want through your leg. Does that sound about right? What's your perspective?"

"Tell me about what you want to be able to do by the time you're done with therapy. What are your goals?"

If you haven't yet accepted your role as a salesperson, now is the time. You are selling your plan of care to the client. You need them to buy-in and follow-through for optimal outcomes.

The home care company I work for has a great initiative to find out the patient's top 3 preferences or interests. Asking about these upfront shows the patient I'm genuinely interested in accommodating their preferences and quickly builds trust. For example:

"I want to be sure that you're happy with your therapy. Do you have a preferred time of day, days of the week, or anything else you'd like your therapists to know about you so we can best serve you?"

Once we get through this first signpost, I'll do a quick summary of what we covered. This shows reflective listening and is a segue into the next signpost. For example:

"Alright Mrs. Smith, thanks for sharing those goals and preferences with me. I'll be sure to communicate them with your following therapists. Let's move on to the next part of the evaluation. I'll be doing a physical assessment starting with your vital signs like blood pressure and heart rate. I'll take a listen to your lungs and then see how you're moving around your home. If it's okay with you, I'd also like to check your skin and incision. Do you have any questions for me about this part of the eval before we get started?"

I'll continue with this flow for the remainder of the evaluation. Signposts introduce each new chunk of material we are covering, and help transition into the next.

This communication system helps the therapist, patient, and any caregivers present stay on task. When side conversations pop-up, it's easier to redirect because everyone knows which "county" we are in for the evaluation. If you imagine the evaluation as a road trip with you as the tour guide and the patient as the passenger, you can feel confident in your communication "driving" skills to get to your destination in a timely manner (and get some point of service documentation done along the way).



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Geriatric Evaluations for Our Nation's Heroes

by Roslyn Burton, PT, DPT and Madeline Versteeg, PT

The Veterans Health Administration (VHA) is the largest integrated healthcare system serving male and female veterans of all United States armed forces. Its vision is to adhere to the "highest standards of compassion, commitment, excellence, professionalism, integrity, accountability, and stewardship" by providing world-class benefits and services¹ to over 9 million veterans.² Of these veterans, forty two percent are 65 years or older and represent World War II, Korean Conflict, Vietnam Era, and peacetime service members.^{3,4} Unfortunately, veterans have higher rates of chronic disease and disability compared to their non-service, aged-matched counterparts⁴ and the VHA has recognized the need to address the care of older adults. Several programs have been established to serve our nation's older heroes; one is the Geriatric Evaluation Center (GEC).

The GEC is a comprehensive, inter-professional program designed to help older veterans "optimize their health, function, and ability of independence inherent to their situation."⁴ The program uses an interprofessional team approach to manage the care of older veterans and help them safely age in place. The Cincinnati VA Medical Center (CVAMC) established its Geriatric Evaluation Center (GEC) in 2018; residents in the Geriatric Physical Therapy Residency Program had the opportunity to contribute to its structure and function. This article provides the specific development, implementation, and highlights the geriatric PT resident's role in the GEC. In addition, a historical perspective on geriatric evaluations is discussed to underscore the importance of the interprofessional team's approach to care. This can be helpful to those interested in establishing a comprehensive program that serves the needs of older adults.

Historical Perspective

The emergence of geriatric evaluations stemmed from the need to appropriately address the health complexities of older adults. Historically, older adults experienced incomplete medical assessments, deficiencies in care, and were inappropriately institutionalized, not yielding best outcomes or practice.⁵ Pioneers, particularly Marjory Warren MD [1847-1960], strived to transform healthcare for older adults. Those efforts promoted rehabilitation, increased the discharge rate of institutionalized elders, and helped change the perception toward older adults.

Collaboration of an interprofessional team increased morale and physical activity among patients^{6,7} while leading to development of a less fragmented care plan.⁸

Geriatric Medical Programs at VHA

The model for comprehensive geriatric care has progressed since the early 1900s and today there are geriatric programs in inpatient, outpatient, and long-term care settings. The Veterans Health Administration (VHA) implemented its first inpatient geriatric program in 1974 at the Little Rock VA Medical Center, named Geriatric Evaluation and Management (GEM) to meet needs of aging veterans. This program provided comprehensive services to manage medications, improve function, manage geriatric syndromes, reduce acute care and long-term care admissions by establishing patient-centered goals.

The GEM program was promising because veterans who received comprehensive care had improved survival rate, function, and mental health.^{4,9} In 1999, the Veterans Millennium Benefits and Healthcare Act mandated that access to geriatric evaluation be included in veterans' benefits packages; this extended services to outpatient settings. The Cincinnati VA Medical Center fulfilled the mandate by establishing an outpatient interprofessional geriatric evaluation program in 2018, the Geriatric Evaluation Center (GEC). The GEC's goals are to work with veterans and their social support person(s) (living partner, family, caregiver, etc.) to reduce nursing home placement, reduce emergency department utilization and hospitalization, improve physical and psychosocial function, improve medication utilization, formulate end-of-life plans, establish coordinated interdisciplinary care plans, and improve diagnostic accuracy to better care for older veterans.⁴

The inaugural interprofessional team for the Cincinnati VA Medical Center's (CVAMC) GEC included geriatric medicine, geriatric psychiatry, neuropsychology, pharmacy, social work, occupational therapy, nutrition, and residents in the Geriatric Physical Therapy Residency Program. Selection criteria were chosen to determine which veterans would be most appropriate for referral to the GEC.⁴ Inclusion criteria are community dwelling veterans 65 years or older who have multiple medical, functional, or psychosocial problems as well as one or more geriatric syndrome(s): major neurocognitive disorder (dementia), delirium, depression, functional



decline, urinary incontinence, polypharmacy, elder abuse, unsteady gait or falls, or malnutrition. Exclusion criteria are acute illness, need for intensive care or total care, terminal illness with less than a six-month life expectancy, active substance abuse disorder, lack of suitable rehabilitation potential, and inadequate social support.⁴ The GEC team partners with the veteran's social support person(s) to better address biopsychosocial concerns and needs; veterans must have their support person(s) present at the meeting.¹⁰ Any CVAMC healthcare provider may refer a veteran to the GEC. These referrals are screened by Geriatric Medicine, and if appropriate, the veteran and his/her support person(s) are scheduled for a GEC appointment. The veteran is informed that the appointment will last approximately 2 hours.

GEC Appointment

A pre-visit telephone interview is conducted by Geriatric Medicine using a questionnaire developed by the interprofessional team. The questionnaire gathers information on medication management, home environment, equipment (assistive devices, eyeglasses, hearing aids and dentures), living situation, activity level and functional status, especially in reference to the amount of assistance needed for bed mobility, transfers, ambulation and ADLs. The physical therapy component of the questionnaire is adapted from the Guide to Physical Therapist Practice, Documentation Template for Physical Therapist Patient/Client Management¹¹ which includes items of living environment, functional status, and activity level. To screen for fall risk, the following questions are included: fall history, fear of falling, and use of ambulatory device.¹² The questionnaire response is provided to each discipline prior to the GEC appointment for review.

On the appointment day, the interprofessional team meets to discuss the veteran's status based on information collected through a medical chart review and questionnaire. The veteran and the social support person (s) are brought into the meeting and can briefly mention any concerns. The veteran is then escorted to a designated treatment room to be individually assessed by component team members. The social support person (s) remains in the conference room to further discuss concerns with the social worker, dietician, and the pharmacist.

Physical Therapy Geriatric Resident Role

The responsibility of the GEC's physical therapist is to contribute to the assessment of the veteran's specific level of function and provide ways to optimize safety and maximize functional potential.¹³ The geriatric PT resident is allotted 20 minutes to complete an assessment which includes the TUG, Five Time Chair Rise, Walk Speed, Four-Square Step Test, and Single Leg Stance.^{12,14} In addition, the Frailty Scale is used to identify those phenotypic as frail or at risk for frailty based on self-reported exhaustion,

weakness (grip strength), walking speed, physical activity, and weight change.¹⁵

Once the PT assessment is completed, another discipline (i.e., OT, Geriatric medicine, Neuropsychology) assesses the veteran while the PT reviews the data and formulates recommendations, which may include:

- Continued physical therapy: either outpatient or home based, to address identified functional deficits
- Equipment needs for safety and ease with mobility and transfers
- Home safety evaluation
- Recommendations for amount of supervision required for safety at home
- Medical alert system if veteran will be home alone for periods of time
- Activity suggestions, which could include a specific exercise program or recommendations of community-based exercise programs, exercise groups, or exercise facilities.
- Adult day programs to provide daytime supervision that increase activity and engagement of the veteran while providing respite for the caregiver.
- Referrals to other VA programs, including pulmonary rehabilitation, Matter of Balance, Whole Health Program for Education classes or support groups, and Gerofit Wellness Exercise Program.

GEC Team Recommendations

The interprofessional team synergistically develops recommendations based on all assessment results and patient-centered goals. These recommendations are shared with the veteran and his/ her support person (s) and recorded in a take home folder. In addition to the PT recommendations, other disciplines may have recommended:

- Medication management to address polypharmacy and/or co-morbidities (pharmacy and geriatric medicine)
- Diet management to address weight gain or weight loss, improve nutritional quality of intake, improve management of blood sugar (dietician)
- Strategies to improve task performance and memory issues, education on functional impact of decreased performance in any component of the assessment (neuropsychology)
- Equipment needs for ADLs, activity suggestions and safety recommendations, driving evaluation (occupational therapy)
- Suggestions for management of anxiety, depression or other psychiatric conditions (geriatric psychiatry)
- Completion of Advance Directives, identification of VA benefits and resources available for home care or adult day programs, referral to community resources for additional services (such as Council on Aging), identification of resources for caregiver support, and discussion about long term care plans (Social Work), and,

- Medical management of co-morbidities, including referral to other medical services: such as audiology, neurology, pulmonary (Geriatric Medicine)

When a discipline is unable to attend weekly GEC appointments, overlap can occur in some areas of assessment (for example, ADL equipment needs, cognitive assessment) and referrals to specific disciplines can be placed for further evaluation and recommendation as needed.

GEC Growth

Since the implementation of the GEC, several changes have been made to improve the offered services. Speech-language pathology is now part of the team to assess speech, swallowing, and cognitive difficulties. Medical students also participate and gain a better understanding of the unique and important contribution of each health care professional to the care of older adults. Geriatric Medicine plans to conduct follow up assessments every 6 months to monitor ongoing needs of the participant and make referrals to disciplines when indicated. Given the large population of older adults currently served at the CVAMC, additional plans to expand the GEC to allow more evaluations per week are being discussed. The COVID-19 pandemic brought restrictions on non-emergent care at VHA. However, due to VHA's commitment to serve veterans, the GEC fast-tracked the use of virtual visits to complete geriatric evaluations.

The benefit of, and need for, the service provided by the GEC has been well established at CVAMC. It successfully serves older veterans by addressing their biopsychosocial needs to improve quality of life. The interprofessional care plans facilitate the ability of the veteran to safely remain in the community for as long as physically and medically appropriate to "age in place." With any potential decline in function, or change in the social support system, alternate care plans can be discussed. In the event of a future hospitalization, having care plans outlined and Advance Directives in place assist the veteran, his/her support system and the geriatrician in medical management and discharge planning. Veteran participants who demonstrate a higher level of function are strongly encouraged to engage in a healthy lifestyle, social engagement, increasing fitness, and wellness. Interprofessional collaboration allows multiple disciplines to work together to develop comprehensive care plans that meet the special needs of each individual and effectively manage his or her care. History and current practices demonstrate it as an exceptional model to implement in all clinical settings.

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Geriatric Functional Milestones: Promoting Movement While Aging

by Logan Taulbee, PT, DPT; Ashleigh Trapuzzano, PT, DPT; Timothy Nguyen, PT, DPT

Adults over the age of 60 are a functionally diverse group who utilize varied movement patterns to participate in activity. In children, developmental milestones provide guidance on the stages of movement from infancy to adolescence. However, no clear understanding exists of how movement continues to change through adulthood and into elderhood. This is likely due to the heterogeneity among aging adults and the challenge of differentiating between age-related and pathological processes. This gap in understanding provides an opportunity to identify and guide aging adults as they experience functional changes. Furthermore, many aging adults do not seek care until they have experienced adverse health events such as a fall or injury. The early screening of physical function in aging adults may detect early changes in health and function prior to an adverse health event in order to improve the aging experience.

Healthcare providers have a role to screen and identify aging adults who are appropriate for further assessment and intervention to mitigate adverse health events. While there are recommendations to screen for increased fall risk, there are no widely established recommendations to screen for functional activity performance. Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs) may be reviewed. However, there may be functional deficits that occur prior to changes in ADLs and IADLs. Furthermore, aging adults may compensate for these performance deficits and continue performing ADLs and IADLs. A screening tool to identify early changes in function would also provide opportunity to promote functional activity participation, rather than disability and negative health events such as falling.

We propose that the routine screening of Geriatric Functional Milestones (GFM) could assist in the timely identification of suboptimal movements, mitigate or prevent adverse health events, and promote maximizing activity and participation in life for optimal aging.

Theory

There are many functional activities that have been integrated into performance measures. We propose using activities from these measures to help aging adults and healthcare providers identify where changes may have occurred or a functional limitation is present. For instance, the inability to complete the 5 times sit-to-stand test is predictive of falls as well as ADL and IADL disability.¹ Floor transfer ability is correlated with physical

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disability, functional independence, and frailty in community-dwelling older adults.² Stair climb performance is associated with lower extremity muscular power, an important muscular quality for function and fall safety in aging adults.³ The ability to walk a quarter of a mile is associated with mortality, physical performance, ADL/IADL disability, and comorbidities.⁴ Other powerful indicators of health and frailty are grip strength and ankle strength.⁵ Ankle plantar flexor strength, which can be measured by the heel rise test, is correlated with gait speed, Timed Up and Go scores, and sit to stand performance.^{6,7} Additional activities such as holding, lifting, or carrying an object are not as common in performance measures. However, it is functionally important to be able to carry groceries, reach into an overhead cabinet, or lift items from the floor in order to participate in daily activities.

Functional activities that require muscle strength, muscle power, cardiorespiratory fitness, standing balance, and flexibility have been chosen in order to provide a comprehensive screen. Preliminary functional milestones included are: walk a quarter of a mile, stand up from sitting without using arms, stand up from the floor without assistance, rise onto toes, ascend and descend steps with a reciprocal pattern, and lift an object overhead.

Implementation

These activities primarily target community dwelling aging adults. There is likely a large number of aging adults who would not be able to perform these activities to the extent described above. However, it is still important for these individuals to be screened for a worsening in their ability to perform these activities or to trial rehabilitative measures such as physical therapy. There could be multiple ways to implement the GFM.

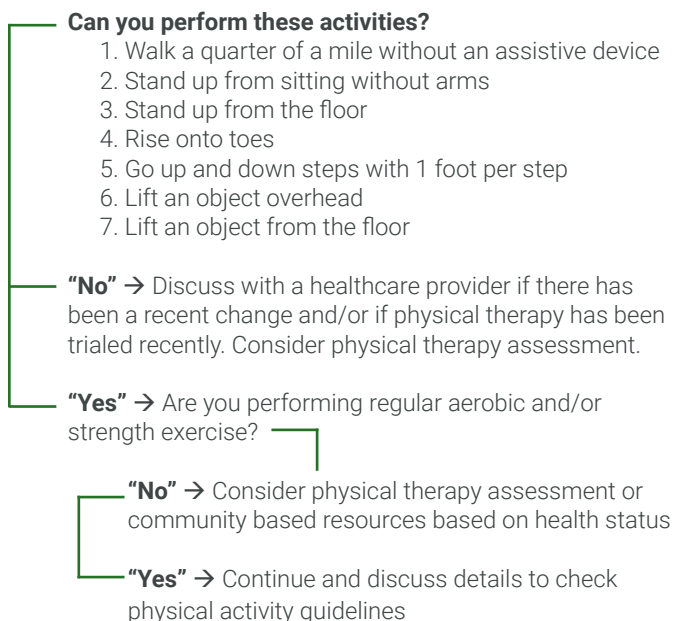
Geriatric Functional Milestones could be utilized in community health. Older adults could perform a self-assessment of their ability to perform these activities or determine if there has been a change in performance. The results could assist the patient in seeking further assessment from their physical therapist or primary care physician. The GFMs could also be implemented as a screen in healthcare facilities. A limitation or change in function should trigger further investigation or assessment. For example, community based independent and assisted living facilities could utilize GFMs to monitor residents over time and identify early changes in functional abilities that could benefit from further assessment and intervention.

Implications

It is important to distinguish that geriatric functional milestones are not meant to be another questionnaire that healthcare providers include during intake paperwork without discussion, but rather a screening tool to be discussed with the patient. A neuromuscular screen or manual muscle test should not be utilized to screen for functional strength because it is not functional. The GFMs are to help the provider have a direct conversation with the patient in order to quickly and purposefully screen functional performance in order to guide further assessment or referral for a comprehensive assessment. Table 1 highlights a preliminary flowchart for community health or a healthcare setting.

A change in an individual's performance of one or more of the geriatric functional milestones may point to underlying impairments that may further develop gradually over time if not addressed. In addition, it could also point to underlying medical changes such as an infection, cognitive change, or

Table 1



*Consider discussing with family members or caregivers if there are memory or communication limitations.

It is important to distinguish that geriatric functional milestones are not meant to be another questionnaire that healthcare providers include during intake paperwork without discussion, but rather a screening tool to be discussed with the patient.

other conditions that warrant further assessment.

A gradual decline in physical function may commonly be a result of sedentary behaviors rather than inherent to the aging process. Most older adults do not meet exercise guidelines and will experience subsequent physiologic effects that will limit functional activity performance. This screening process can help healthcare providers link physical function to exercise and highlight the functional implications of participating in exercise. Adults of any age want to know the purpose behind recommendations and how it directly affects the activities that are meaningful to them. This provides healthcare providers the opportunity to recommend specific exercise, refer to a gym, or refer to a physical therapist to prevent further decline. Ultimately, healthcare providers and more specifically physical therapists should be promoting optimal movement and combating functional decline.

Future Direction

Further research is needed to identify the most appropriate GFMs to include in order to capture functional qualities that affect health and function. Research should also include identifying an objective value that indicates a meaningful change within one activity or overall. Another direction may include the association with disability, frailty, or hospitalization.

Conclusion

Physical therapists are the movement experts. We should guide and optimize movement throughout the lifespan, which should include aging beyond age 21. The GFMs may promote participation in activities and regular exercise, rather than focus on a declinist's view of aging. Utilizing GFMs to standardize practice could also facilitate a shift from tertiary reaction to early intervention in order to empower all adults to optimally age

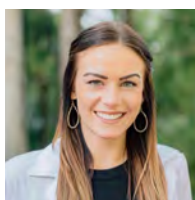
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The idea of the Geriatric Functional Milestones developed over our residency while discussing our thoughts about motor control. We realized that there is a lack of understanding on how motor control and activities change for aging adults. We thought the GFMs could promote movement, rather than promote impairment. We later presented a platform presentation virtually for the 2021 Combined Sections Meeting, which was a great way to share our thoughts.

Resident's Corner

The Resident's Corner is column space set aside in each issue of *GeriNotes* to highlight the work, observations, and accomplishments of a resident(s) in one of the [20 residency and fellowship accredited programs](#) of the [American Board of Physical Therapy](#). All residents are invited to submit work or story ideas to gerinoteseditor@gmail.com.



High Challenge Activities for Low Tech Adults and their Therapists

Editor's Note: Readers are encouraged to submit simple tips and tricks to use in the clinic that are low-tech, low-cost, and yet challenging. Jill Heitzmann has kindly agreed to show her tricks with this one

Dual Task Cognition and Fuctional Balance

- A deck of playing cards, with a small piece of peel and stick velcro attached to the front of the card, is attached to a hard board. The big board is then placed against a wall or other upright surface.
- Another deck of cards is prepared for the participant with peel and stick velcro on the back of these cards.
- The deck of cards are shuffled. The patient draws a card and reaches to match the card to the one on the board. This task can be done in sit or standing. In standing, the patient can stand on firm surface or foam or other dynamic surface for greater challenges.
- The task can be made harder with cuff weights around wrists.
- If the board is made of smaller (8 1/2" x 11") boards then they can be placed further apart for greater reaching.
- Since this is for cognitive functions similar to trail making, the cards can be placed on the board in simple one suit fashion with only a few cards for those with lower function T.
- To increase cognitive challenge, set up the boards with 2,3, or all 4 suits.



An Exercise in Reality: Applying the WHO Physical Activity Guidelines for Persons with Complex Conditions

by Mike Studer, PT

Editor's Note: This case study is published in advance of the September 21, 2021 Journal Club webinar and accompanies the article: Are the Recommended Physical Activity Guidelines Practical and Realistic for Older People With Complex Medical Issues?. These case studies are intended to demystify the more formal statistics and format of a peer-reviewed article and translate key concepts into clinically usable information. Join us for Journal Club on the third Tuesdays of January, March, May, July, September and November at 8 pm ET to discuss current concepts with a wide range of peers.

"Movement is the commonality of life..." – Mrs. Kvarsten

Levinger and Hill¹ addressed the need for modifications to the World Health Organization (WHO) physical activity (PA) guidelines in their 2021 article entitled, "Are the Recommended Physical Activity Guidelines Practical and Realistic for Older People with Complex Medical Issues?" published in the *Journal of Geriatric Physical Therapy*. The PA guidelines include 150 minutes of moderate-intensity or 75 minutes of high-intensity activity per week. In this case study, we will explore the application of these guidelines, without modification, for a 91-year-old individual with a complex medical history and recent frailty.

Subjective examination/Primary complaint: Mrs. Kvarsten is a 91-year-old female referred to outpatient physical therapy for management of her functional mobility that can best be summarized as severe deconditioning and frailty, with concomitant elevated fear and fall risk. Her medical diagnoses for this plan of care include chronic low back pain, Charcot-Marie Tooth (CMT) neu-

ropathy, arrhythmia, congestive heart failure (CHF), pneumonia, deep venous thrombosis (DVT), frequent falls. The patient clarifies that she has experienced² "bad falls" this year and 3-4 more near falls (losses of balance without change in level). Although she never tested positive for Coronavirus, there are several points in her medical care that indicate (as she relays) this testing was simply not conducted.

As we understand the importance of listening to our patients, Mrs. Kvarsten's description of her medical course follows, "About a year ago, I took a fall when I was cleaning my house and tripped over some stacks of papers. I fractured a rib. Then, I came down with a bronchial-type of damage, to the point that I had to go to the hospital. I was not getting better. My feet were like footballs. I had extreme swelling. The doctor put me on a 2 week monitor that had to be sent to California...so that took 3 weeks. They determined that I was in cardiac arrhythmia the whole time. I needed a cardiac angioplasty. That did not help. So, then they decided that I needed an

Table 1. Current medications

- Acetaminophen 325mg – 3-4 at night for sleep
- Alpha lipoic acid 600mg, daily for CMT
- Vitamin C 500mg
- Calcium Citrate 1000mg 1 every other day
- Captopril 12.5mg 2x/day for CHF
- Co-Q10 100mg
- Cod liver oil 1000mg
- Eliquis 2.5 tab morning/night – prophylactic for DVT
- Probiotic Citrucel 1 evening
- Furosemide 40mg BID for CHF
- Losartan 25mg morning for blood pressure/CHF
- Multivitamin: Centrum, daily
- Potassium Chloride daily
- Pravastatin 20mg daily
- Vitamin D 2000 morning
- Vitamin E 200mg daily



without fear at all". She adds a goal of "getting outside and working"; this was a recurrent theme in her interview. Finally, Mrs. Kvarsten elaborates, "I belong outdoors. Moving outdoors. Movement is the commonality of life. Even the driest of the trees moves in the wind, until it dies."

Sleep: Mrs. Kvarsten reports that her sleep is disturbed by pain to some degree on most nights. As noted in her medication list, she uses acetaminophen to dull the pain and reports getting 6-8 hours of sleep with 1-2 wakeful periods to urinate, nightly.

Objective Examination at Initial Evaluation/ Cognitive Screen: Mrs. Kvarsten is A+O x3. Her vital signs at rest were recorded as follows: heart rate (HR) 70 bpm, blood

Table 2. Initial Evaluation

Test Score	
Montreal Cognitive Assessment	26/30
Activities-Specific Balance Confidence Scale	15.6%
2 Minute Walk Test (2MWT)	228'
30 second sit to stand (30SSTS)	4
Four Stage Balance Test (FSBT)	1



ablation. That did not help much, either. I have been struggling as to what I can do. I have been sedentary for a year. My doctors said, "Your muscles have deteriorated. Your heart will get better if your body gets exercise."

Medical history and current medications: Charcot Marie Tooth (CMT) with bilateral (B) involvement, B knee osteoarthritis with 2 previous arthroscopic surgeries on her R knee, chronic low back pain (LBP), right quadriceps sartorius muscle (mm) tumor (sarcoma) excised in 2005, intercranial hemorrhage (ICH) with craniotomy (2008) due to ruptured aneurysm. She has age-related hearing loss and does not wear hearing aids. Her fall history is significant for 2 falls this year (past 6 months) as noted above.

Home environment and current level of function: Mrs. Kvarsten is widowed. She lives with her 31-year-old grandson in a multi-story home on her farm. Her bedroom is on the second level. She frequently finds herself sleeping in her recliner chair due both to effort to ascend the stairs and back pain in most sleeping positions. This patient's support system includes a local daughter, the referenced grandson, and an adoptive granddaughter. All of her supports work outside the home on variable schedules and are not consistently available for transportation. Hired transport by service or taxi can be cost prohibitive due to the distance from her home to city center, making the recommended frequency of therapy prohibitive when combined with medical visits. The patient states her goals as, "...getting around the house without help and I guess

pressure (BP) 148/89, percentage of oxygen saturation in the bloodstream (SpO2) 96%, and respiration rate (RR) 12/min. The patient scored a 26/30 on the Montreal Cognitive Assessment (losing 2 points on delayed recall and 2 points in the category of attention). The patient scored 15.6% on the Activities-Specific Balance Confidence Scale. Her functional examination included, in order: 2 Minute Walk Test (2MWT); 30 second sit to stand (30SSTS); and the Four Stage Balance Test (FSBT). Results of all tests are included in Table 2. Her response to the 2MWT was very informative, including her physiologic response expressed through change in vital signs to 92bpm, BP 170/89, SpO2 94%, and RR 20/min. The patient ambulates independently using a single point cane (SPC), relying on it heavily throughout the test. She expressed her perceived exertion on the modified BORG (0-10) as 8/10; she was allowed to recover for 2 minutes. She did not express pain provoked by the test and ambulated 228'. In consideration of energy conservation, the patient was only screened for flexibility and functional assessments served as her initial strength metrics. Additional functional measures including the Timed Up and Go as well as more comprehensive balance batteries (Berg or BEST) were deferred.

Assessment: Mrs. Kvarsten presents as a person with very high fall risk, elevated primarily because of her multifactorial loss of strength, power, and endurance. These increase her already elevated fall risk due to severe

CMT. Despite this, she finds enjoyment in life and the longevity that she is experiencing. She is well-motivated and understands that our exercise prescription for her includes 80 minutes the first week, then up to 115, and finally 150 minutes at moderate intensity/week by the end of 3 weeks. She verbalizes that this level of activity is to be held and maintained. She expresses an understanding that her outcomes of fall frequency, perceived fatigue, shortness of breath, and reduced independence should all be responsive to these efforts.

Based on this assessment, Mrs. Kvarsten would benefit from 2x/week skilled physical therapy to improve her fitness (cardiopulmonary, muscular endurance, strength), maximize functional mobility, improve ADL function, and decrease fall risk. She will also benefit from the prescrip-

tion of a home exercise program to achieve the recommended minutes of activity based on the WHO levels of 150 minutes of moderate activity per week or 75 minutes of high intensity activity per week (hereafter abbreviated as 150/75). On initial examination, the patient was educated on the WHO recommendations and their role to complement the clinical plan of care. She participated in and agreed with some discussion about the relevance and application for persons of her age with her medical conditions.

Plan: Mrs. Kvarsten will receive 1-2x/ week outpatient services for 6-8 weeks prior to reassessment. Treatment sessions will include endurance, balance, and strength elements using the treatment environment of her preference, aquatics, and most specifically – an underwater treadmill. It should be clearly stated that the skilled PT sessions are only a part of the stated plan of care for this patient, as she is fully aware that these sessions account for 70 minutes of her weekly planned 150 minutes of moderate-intensity exercise. This exercise program is detailed below, in Table 2, with focus on fitness as an intervention to reduce many of her physiologic impairments and functional limitations.

In an intermediate phone-call check-up 2 weeks after the initial examination, the patient admitted to 30-40% compliance with her HEP. She noted, "The sit to stands...I have to use my hands. The walking is tough, it has been so hot.' She has been attending the 2x/week skilled PT visits, with a majority of the time spent on the underwater treadmill. The patient adds, "I feel like a different person. I am breathing better. My ankles are not as swollen. My oximeter shows good numbers, and my blood pressure is doing better (151/83) I would like to see it consistently under 140 (systolic)."

Discussion: In their article on modifying the physical activity guidelines for persons with complex medical histories, Levinger and Hill¹ suggest a relaxed guideline for persons that are medically complex. In this case, we demonstrate how a minute of moderate intensity activity for a person that is fit, is still 60 seconds. That minute of exertion lasts just as long as a minute for a person that is frail. The overall calorie expenditure and work accomplished would and should not be equal across all populations; a perceived exertion rate and a total of minutes per week can be the equalizing metrics. The WHO PA guidelines are not based on steps per day or calories spent; they should not be. While research clearly informs us that the brain and body benefit from exercise, we must recognize in the end that we are talking about people, not isolated body systems in a vacuum. Physical therapists must also understand that the brain and body are inseparable. Where one goes, so goes the other. This is evidenced in the brain's elation from endorphins after productive exertion, to the physiologic effects imposing limits on what the body is capable of when subdued by



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The APTA Geriatrics Journal Club is a free, facilitated webinar-based discussion about a Journal article where you interact directly with the author and a clinician with a relevant case study that demonstrates how that information could be used. It's a fun way to move yourself in the direction of life learning and beef up your evidence-based practice.

The next APTA Geriatrics Journal Club will be held **September 21, 2021** at 8 pm ET.

We will discuss **Are the Recommended Physical Activity Guidelines Practical and Realistic for Older People With Complex Medical Issues?** Pazit Levinger; Keith D Hill. J Geriatr Phys Ther. 2021 Jan/Mar 01;44(1):2-8

Case Study: **An Exercise in Reality: Applying the WHO Physical Activity Guidelines for Persons with Complex Conditions** by Mike Studer, PT

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major depression. Activity must be our focus, not exercise for the sake of fitness. This may never be more evident than in the frail and complex patient as reported in this case.²

Mrs. Kvarsten's PT sessions are engaging for her. She loves the aquatic training environment; this activity is verbally tied to her goals of working on the farm. At this trajectory, she will soon have the capacity to meet her goals of being outdoors and contributing to tasks that her farm needs her for. When she does begin work outdoors, those minutes will count as activity, as exercise, and as a psychological boost. For the most complex and frail person to contribute to a family, a project, or a parcel of land, PTs understand that both the body and mind can benefit. After all, it is not much of a tweak to the old dairy council advertisement to say: "Work, it does a body good."

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Mike Studer, PT, MHS, NCS, CEEAA, CWT, CSST received his physical therapy degree from the University of Missouri-Columbia in 1991. He received his post-professional MHS degree in physical therapy with neurologic emphasis from the University of Indianapolis and his transitional DPT from the College of St. Scholastica in 2021. He has been board-certified as a Clinical Specialist in Neurologic Physical Therapy since 1995 and

has been designated a Certified Exercise Expert in the Aging Adult (CEEAA) since 2011. Mike has served as the Vice-president of the Academy of Neurologic Physical Therapy of the APTA and has been the chair and vice-chair of several special interest groups at the national level in each of the Academies of Neurologic and Geriatric PT, including Balance and Falls, Stroke, and the Practice Committee in neurology. He is a full-time treating therapist at and founder of Northwest Rehabilitation Associates, in Oregon. Studer has presented courses and published articles on neurologic and geriatric rehabilitation since 1995 and has authored and co-authored over 30 articles on topics of neurology and geriatrics, as well as several book chapters on stroke, PD, and preventative care as well. To date, Mr. Studer has presented in 9 different countries and 48 states on the topics of balance, motor control, motor learning, cognitive impairment and case management. He was awarded the Mercedes Weiss Service Award from the Oregon Chapter of the APTA in 2021, and in 2011 Clinician of the Year by the Academy of Neurologic Physical Therapy – a section of the American Physical Therapy Association. In 2014, Mike received the same award by the APTA Geriatrics – the first to receive this national distinction from each entity.

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Challenging Balance Programs for Older Adults Functioning at a High Level

by Carole Lewis, PT, DPT, PhD, FAPTA and Linda McAllister, PT, DPT

"Intensity is the Price of Excellence" – Warren Buffet

Warren Buffet's summary of success in life holds equally true for exercise programs designed for patients. Balance programs that appropriately challenge participants are difficult to design and progress for clients functioning at any level. It can be even more difficult to develop good evidence-based programs for those already performing at a higher skill level. Do not fear, there are many good protocols out there.

All successful programs have in common an emphasis on intensity. Getting people to maintain their functional level is relatively straight forward. Real progress requires high intensity.

Let us begin with Garcia-Pinillos' protocol published in 2019.¹ It was a 12-week concurrent, high-intensity, interval, strength, and endurance training program conducted with healthy older people. Strength training was distributed into 1-minute blocks and progressed from a 20:40 minute work-rest ratio (weeks 1–4) to a 40:20 work-rest ratio (weeks 9–12). External load was added and self-paced with participants having the option to perform exercises with a 3, 5, or 7 kg medicine ball or without external load. Participants were instructed to perform as many repetitions as they could during the work period.

The program included the following exercises:

- sit to stand (chair)
- medicine ball forward chest/overhead throws
- farmer's walk
- resistance band shoulder press
- hip marching seated on an exercise ball
- bench step ups
- resistance band row (standing)
- medicine ball squat to overhead throws
- foot ladder drills (weeks 5–12)
- twisting medicine ball pass with partner (weeks 9–12).
- 2 sets of this circuit were performed in every session, interspersed with endurance training (with no recovery breaks in between bouts).

Emilio and colleagues published the results of a different 12-week program for older adults in the *Journal of Sports, Science and Medicine*.² Their twice-weekly protocol improved flexibility, balance, and lumbar strength. The 50-minute program began with a 10-minute warm up of slow walking followed by a progressive Swiss Ball program of wall squats, bridges, and prone extensions.

The third segment was a progressive BOSU program of stepping on and off the BOSU and balancing on the BOSU. The 2 exercise segments lasted 30 minutes and were followed by a 10-minute cool down of lower extremity stretching and relaxation.

A 2020 meta-analysis summarized programs that can help patients outside of the physical therapy setting.³ Mattle et al examined 29 trials involving 1579 participants. They found that a large variety of activities, from ballroom dancing to Tai Chi to aerobic dance classes, significantly reduced the rate of falls and increased lower body strength. The most beneficial programs lasted at least 6 weeks and continued up to one year. Interventions lasting 35 to 120 minutes and performed 1-4 times a week were the most beneficial.

The key to getting good/excellent results is to make sure the program is intense enough. Despite this, researchers find that therapists tend to under prescribe high-intensity balance tasks. Using something like The Balance Intensity Scale for Therapists developed by Farlie,⁴ which correlates with exercise intensity, can help guide us. This scale contains 2 components. The first step listed below is more detailed, but the second is only one question and very easy to use in a clinical setting.

Step 1: The Therapist observes and scores pre-, in-task and an overall rating of the patient's performance of the exercise in relation to observed intensity. The observed intensity description has 5 components.

Step 2: The Global Rating Scale of Balance Effort, comprised of one question: How hard did you have to work to keep your balance during this task? The participant responds with a 1-5 response where 1 equals no effort and 5 is maximal effort. For a challenging balance program, a response should be at least a 4 (a lot of effort). How easy would this be to use daily to be sure we are giving enough intensity!

The research is clear. It may be out of your comfort zone, at least in the beginning, but the results are worth making the effort to design, progress, and monitor, not just maintain, challenging balance programs for patients who are functioning at all levels.

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