HOME HEALTH SECTION
AMERICAN PHYSICAL THERAPY ASSOCIATION

Medications and Physical Therapy Practice

Janes M, Adamski H, Strunk E, Kornetti D, Langham B, Walsh J

Background/Purpose

The practice of physical therapy is comprised of many facets of care and oversight. While the list of responsibilities and activities associated with physical therapy is lengthy, the first and foremost concern is to ensure the patient is safe and care that is provided does not jeopardize the health and well-being of the patient.

Ensuring safety for patients is an elemental practice concern associated with providing a service to the public. One element of safety pertains to the role of physical therapy when evaluating and examining a patient's current condition and considering the potential impact of currently prescribed medications on the plan of care. As physical therapy continues to be instrumental in fostering a patient's ability to maintain and maximize functional capacity, considerations that may impact the overall outcome of care must be considered. In the United States, the 65 and older population is expected to reach 73 million persons by the year 2030 representing 20% of the total US population.[1] As our population continues to grow, many patients in this age group have multiple chronic conditions that may require several medications. According to the National Center for Health Statistics, 92% of persons aged 65 and older have taken at least one prescription drug and 43% have taken at least 5 or more prescription drugs in the past 30 days.[2] Polypharmacy, which is commonly defined as taking five or more drugs, increases the risk of drug interactions, adverse drug events, nonadherence, and reduced functional capacity.[3]

Drug interactions and adverse drug events (ADEs) have been shown to be one of the most common types of adverse events after hospital discharge.[4] Physical Therapy is often provided following hospital discharge in multiple Post-Acute Care (PAC) settings, out-patient based services and, in many instances, serving as the first provider following hospital discharge. Ensuring safe care transitions includes performing a drug regimen review and medication reconciliation, instructing patients and caregivers in self-care methods and facilitating communication with physicians. A primary concern is non-adherence with medications in older adults which has been associated with polypharmacy and complicated medication regimens.[5-9] When patients are taking 4 or more medications, the rate of non-adherence is 35%.[10] Medication non-adherence is associated with potential disease progression, treatment failure, hospitalization, and ADEs, all of which could be life-threatening.

When changes are made to medication regimens such as a new medication, stopping a medication, changing a dosage or type of medication, functional status and/or ability may be impacted. Another important concern is functional decline which has also been associated with polypharmacy most notably in older patients. Increased prescription medication use has also been found to be associated with the diminished ability to perform instrumental activities of daily living (IADLs) and decreased physical functioning.[11] Another prospective study found that patients taking 10 or more medications had diminished functional capacity and trouble performing daily tasks.[12] For patients reporting a fall in the past year, higher medication use was found to be associated with functional decline.[13] Physical therapy practitioners are well positioned to help monitor, identify and communicate associated findings related to medications to appropriate providers.

The Centers for Medicare and Medicaid Services (CMS) currently requires providers in different settings, either as a Condition of Participation (CoP) or to obtain full payment for services, to perform medication reconciliation and/or a drug regimen review. While this requirement may vary by practice setting, the responsibility remains consistent to ensure optimal patient safety while under care of the physical therapy practitioner.

The Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014 requires the performance of a Drug Regime Review (DDR), a Quality Measure, be adopted to fulfill the medication reconciliation domain requirement of the IMPACT Act across all PAC settings. Regardless of practice setting, physical therapists and physical therapist assistants should understand the impact and potential adverse effects exercise and/or activity may have on a patient when concurrently taking prescribed medications. Medications can impact a patient's condition or inhibit a patient's anticipated progress while under a therapy plan of care. Practitioners not cognizant of this importance may jeopardize a patient's safety and outcome of care.

The Joint Commission confirms that given the large number of persons receiving health care who take multiple medications and with the complexity of managing those medications, make medication reconciliation an important safety issue. Medication reconciliation requires reviewing and understanding what the patient was prescribed and the medications the patient is actually taking.

The 2017 Joint Commission Home Care National Patient Safety Goals focus on the risk points of medication reconciliation.[14] Goal #3 includes:

- coordinating information during transitions in care both within and outside of the organization
- patient education on safe medication use
- communications with other providers

Despite acknowledging the current need, importance, and focus of medications on patient safety and outcomes there continues to be variability in practice as well as state-specific expectations and limitations on the role of physical therapy and medications. Often a misunderstanding of terminology and responsibility associated with medications impact what is practiced and/or allowed. As an example, understanding definitions and differences of drug regimen review, medication review, medication reconciliation and medication management often provide a framework of what is acceptable and expected practice. These terms unfortunately are often intermixed and lead to confusion on therapy practice related issues regarding medications. In addition to state-specific variables, facility and/or company policies may differ in how they define elements of medication review.

As physical therapy practice has continued to evolve as both a doctoring profession and of practice autonomy, providing a comprehensive and thorough evaluation, examination and assessment process is necessary and is ever more important. Understanding the "structure, function, and potential of the human body" is dependent upon what potentially influences the human body and ability to optimize movement. Physical therapists and physical therapist assistants must consider intrinsic and extrinsic factors that would impact a patient's ability, progress and outcome associated with care. Addressing medications in a drug regimen review and medication reconciliation should be an integral part of practice to help ensure appropriate patient care is delivered and optimal clinical outcomes are obtained.

APTA Position and Resources

Vision Statement for the Physical Therapy Profession and Guiding Principles to Achieve the Vision

Adopted by APTA's House of Delegates (House) in 2013, APTA's **Vision Statement for the Physical Therapy Profession** is supported by **Guiding Principles to Achieve the Vision**, which demonstrate how the profession and society will look when the vision is achieved. APTA's strategic plan helps the association work toward this vision.

Vision Statement for the Physical Therapy Profession

Transforming society by optimizing movement to improve the human experience.

Guiding Principles to Achieve the Vision

Movement is a key to optimal living and quality of life for all people that extends beyond health to every person's ability to participate in and contribute to society. The complex needs of society, such as those resulting from a sedentary lifestyle, beckon for the physical therapy profession to engage with consumers to reduce preventable health care costs and overcome barriers to participation in society to ensure the successful existence of society far into the future.

While this is APTA's vision for the physical therapy profession, it is meant also to inspire others throughout society to, together, create systems that optimize movement and function for all people. The following principles of Identity, Quality, Collaboration, Value, Innovation, Consumer-centricity, Access/Equity, and Advocacy demonstrate how the profession and society will look when this vision is achieved.

The principles are described as follows:

Identity: The physical therapy profession will define and promote the movement system as the foundation for optimizing movement to improve the health of society. Recognition and validation of the movement system is essential to understand the structure, function, and potential of the human body. The physical therapist will be responsible for evaluating and managing an individual's movement system across the lifespan to promote optimal development; diagnose impairments, activity limitations, and participation restrictions; and provide interventions targeted at preventing or ameliorating activity limitations and participation restrictions. The movement system is the core of physical therapist practice, education, and research.

Quality: The physical therapy profession will commit to establishing and adopting best practice standards across the domains of practice, education, and research as the individuals in these domains strive to be flexible, prepared, and responsive in a dynamic and ever-changing world. As independent practitioners, doctors of physical therapy in clinical practice will embrace best practice standards in examination, diagnosis/classification, intervention, and outcome measurement. These physical therapists will generate, validate, and disseminate evidence and quality indicators, espousing payment for outcomes and patient/client satisfaction, striving to prevent adverse events related to patient care, and demonstrating continuing competence. Educators will seek to propagate the highest standards of teaching and learning, supporting collaboration and innovation throughout academia. Researchers will collaborate with clinicians to expand available evidence and translate it

into practice, conduct comparative effectiveness research, standardize outcome measurement, and participate in interprofessional research teams.

Collaboration: The physical therapy profession will demonstrate the value of collaboration with other health care providers, consumers, community organizations, and other disciplines to solve the health-related challenges that society faces. In clinical practice, doctors of physical therapy, who collaborate across the continuum of care, will ensure that services are coordinated, of value, and consumer-centered by referring, co-managing, engaging consultants, and directing and supervising care. Education models will value and foster interprofessional approaches to best meet consumer and population needs and instill team values in physical therapists and physical therapist assistants. Interprofessional research approaches will ensure that evidence translates to practice and is consumer-centered.

Value: Value has been defined as "the health outcomes achieved per dollar spent."[15] To ensure the best value, services that the physical therapy profession will provide will be safe, effective, patient/client-centered, timely, efficient, and equitable.[16] Outcomes will be both meaningful to patients/clients and cost-effective. Value will be demonstrated and achieved in all settings in which physical therapist services are delivered. Accountability will be a core characteristic of the profession and will be essential to demonstrating value.

Innovation: The physical therapy profession will offer creative and proactive solutions to enhance health services delivery and to increase the value of physical therapy to society. Innovation will occur in many settings and dimensions, including health care delivery models, practice patterns, education, research, and the development of patient/client-centered procedures and devices and new technology applications. In clinical practice, collaboration with developers, engineers, and social entrepreneurs will capitalize on the technological savvy of the consumer and extend the reach of the physical therapist beyond traditional patient/client–therapist settings. Innovation in education will enhance interprofessional learning, address workforce needs, respond to declining higher education funding, and, anticipating the changing way adults learn, foster new educational models and delivery methods. In research, innovation will advance knowledge about the profession, apply new knowledge in such areas as genetics and engineering, and lead to new possibilities related to movement and function. New models of research and enhanced approaches to the translation of evidence will more expediently put these discoveries and other new information into the hands and minds of clinicians and educators.

Consumer-centricity: Patient/client/consumer values and goals will be central to all efforts in which the physical therapy profession will engage. The physical therapy profession embraces cultural competence as a necessary skill to ensure best practice in providing physical therapist services by responding to individual and cultural considerations, needs, and values.

Access/Equity: The physical therapy profession will recognize health inequities and disparities and work to ameliorate them through innovative models of service delivery, advocacy, attention to the influence of the social determinants of health on the consumer, collaboration with community entities to expand the benefit provided by physical therapy, serving as a point of entry to the health care system, and direct outreach to consumers to educate and increase awareness.

Advocacy: The physical therapy profession will advocate for patients/clients/consumers both as individuals and as a population, in practice, education, and research settings to manage and promote change, adopt best practice standards and approaches, and ensure that systems are built to be consumer-centered.

Definitions

- **Drug Regimen Review** - A review of all medications the patient is currently using to identify any potential adverse effects and drug reactions, including ineffective drug therapy, significant side effects, significant drug interactions, duplicate drug therapy, and non-compliance with drug therapy[17]
- **Medication Reconciliation** – The process of creating the most accurate list possible of all medications a patient is taking – including drug name, dosage, frequency, and route – and comparing that list against the physician's admission, transfer, and/or discharge orders, with the goal of providing a correct list of medications to the patient at all transition points.[18]
- **Medication Management -** Definition adopted by the pharmacy profession in 2004 inclusive of a service or group of services that optimize therapeutic outcomes for individual patients. Includes medication therapy review, pharmacotherapy consults, anticoagulation management, immunizations, health and wellness programs, and many other clinical services. Pharmacists provide medication therapy management to assist patients in achieving the best benefits from their medications by actively managing drug therapy and by identifying, preventing, and resolving medication related problems.[19]

Selected Resources:

- Pharmacology in Physical Therapist Practice HOD P06-04-14-14
- Guidelines: Physical Therapy Documentation of Patient/Client Management BOD G03-05-16-41
- Minimum Required Skills of Physical Therapist Graduates at Entry Level BOD G11-05-20-49
- APTA Official Statement: The Role of Physical Therapists in Medication Management
- APTA: Medication Management and Physical Therapists
- APTA: Guide to Physical Therapist Practice
- 2019 Quality ID #130 (NQF 0419): Documentation of Current Medications in the Medical Record
- Providing Physical Therapy in the Home http://www.homehealthsection.org/global_engine/download.asp?fileid=9BAAE903-74A0-4560-BF9F-AA801056CEAA&ext=pdf
- OASIS D Guidance Manual https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/Downloads/OASIS-D-Guidance-Manual-final.pdf
- CMS Home Health Quality Initiatives- https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/HHQIQualityMeasures.html
- Medicare Benefit Policy Manual- Chapter 7 https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/bp102c07.pdf
- 42 CFR Part 484 Interpretive Guidelines: Home Health Agencies (484.55c) https://www.cms.gov/Regulations-and-Guidance/Legislation/CFCsAndCoPs/homehealth.html

References:

1. United States Census Bureau, U.S Department of Commerce, Economics and Statistics Administration. Accessed 10/10/2017 @ http://www.ncsl.org/Portals/1/Documents/nalfo/USDemographics.pdf
2. National Center for Health Statistics. Health, United States, 2016: With Chartbook on Long-term Trends in Health. Hyattsville, MD. 2017.
3. Maher RL, Hanlon J, Hajjar E. Clinical consequences of polypharmacy in elderly. *Expert Opin Drug Saf* 2014;13(1):1– 11.
4. Agency for Healthcare Research and Quality. Readmission and adverse events after discharge. Accessed 10/102017 @ https://psnet.ahrq.gov/primers/primer/11/adverse-events-after-hospital-discharge
5. Hajjar ER, Cafiero AC, Hanlon JT. Polypharmacy in elderly patients. *Am J Geriatr Pharmacother*. 2007;5:345–51.
6. Vik SA, Maxwell CJ, Hogan DB. Measurement, correlates, and health outcomes of medication adherence among seniors. *Ann. Pharmacother*. 2004;38:303–12.
7. Lee VW, Pang KK, Hui KC, et al. Medication adherence: is it a hidden drug-related problem in hidden elderly? *Geriatr Gerontol Int*. 2013.
8. Colley CA, Lucas LM. Polypharmacy: the cure becomes the disease. *J Gen Int Med*. 1993;8:278–83.
9. Salazar JA, Poon I, Nair M. Clinical consequences of polypharmacy in the elderly: expect the unexpected, think the unthinkable. *Expert Opin Drug Saf*. 2007;6:695–704.
10. Rollason V, Vogt N. Reduction of polypharmacy in the elderly: a systematic review of the role of the pharmacist. *Drugs Aging*. 2003;20:817–32
11. Magaziner J, Cadigan DA, Fedder DO, Hebel JR. Medication use and functional decline among community-dwelling older women. *J Aging Health*. 1989;1:470–484.
12. Jyrkka J, Enlund H, Lavikainen P, et al. Association of polypharmacy with nutritional status, functional ability and cognitive capacity over a three-year period in an elderly population. *Pharmacoepidemiol Drug Saf*. 2010;20:514–522.
13. Stel VS, Smit JH, Plujim SM, Lips P. Consequences of falling in older men and women and risk factors for health service use and functional decline. *Age Aging*. 2004;33:58–65.
14. Home Care National Patient Safety Goals, Home Care Accreditation Program. Accessed 1/10/2017 @ https://www.jointcommission.org/assets/1/6/NPSG_Chapter_OME_Jan2017.pdf
15. Porter ME, Teisberg EO. Redefining health care: creating value-based competition on results. Boston: Harvard Business School Press, 2006.
16. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: Institute of Medicine of the National Academies, 2001.
17. Medicare and Medicaid Program: Conditions of Participation for Home Health Agencies. Accessed 4/11/2019 @ https://www.federalregister.gov/documents/2017/01/13/2017-00283/medicare-and-medicaid-program-conditions-of-participation-for-home-health-agencies
18. Institute for Healthcare Improvement: Medication Reconciliation to Prevent Adverse Drug Events. Accessed 4/11/2019 @ http://www.ihi.org/Topics/ADEsMedicationReconciliation/Pages/default.aspx
19. American Pharmacists Association. Accessedd4/11/2019 @ http://www.pharmacist.com