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Point of View

Reflection on Nancy T. Watts' Division of Physical Therapist and Physical Therapist Assistant Responsibility in Clinical Practice: Future Directions

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In 1971, Nancy Watts, PT, PhD wrote a classic paper that explored the tasks, division of labor, and level of supervision for aides, physical therapist assistants, and physical therapists.[1] Dr Watts' analysis was notable due to its stimulation of discussion about professional issues that continue to have relevance for contemporary practice.[2] Almost 50 years ago, Watts observed that the increased demand for physical therapy services required a practice change that included utilization of physical therapist assistants to fill the gap. "As members of a service profession, physical therapists bear responsibility for seeing that an adequate supply of services is available, that their quality is consistent with the present level of knowledge in the field, and that the cost of service is kept as low as possible."[1(p 24)]

The 21st-century demand for physical therapy remains fueled by the number of aging baby boomers utilizing medical services and increased access to health insurance due to the affordable care act.[3]

Described as a "pragmatic visionary" in physical therapist education,[2] Watts raised important questions regarding the imperative of physical therapists and Physical therapist assistants to collaboratively, effectively, and efficiently deliver patient care that is safe, ethical, and effective.[1]

An opportunity exists to reexamine the Watts article, which critically analyzed supervision and division of labor between physical therapists and physical therapist assistants within a theoretical framework. Revisiting the Watts' perspective is timely given that 2019 marks the 50th anniversary of the first cohort of 15 physical therapist assistants to graduate from the College of St. Catherine in Minnesota and Miami Dade College in Florida.[4]

The roles and responsibilities of the physical therapist and physical therapist assistant have evolved dramatically since the 1960s. The current context of medicine has forced changes, including the evolution of the first professional degree for physical therapists to a clinical doctorate and growth in the number of physical therapist assistants. These professional transformations have augmented the need to maximize the physical therapist–physical therapist assistant relationship. Unfortunately, physical therapists often graduate with inadequate education regarding the roles, scope of work, utilization, and supervision of physical therapist assistants.[5,6] Clarification and reciprocal knowledge of each providers' role may assist with avoiding a fractured relationship between the two and optimizing health care quality and outcomes, patient satisfaction, cost of care, and reduce the potential for miscommunication.

In this point of view piece, we discuss the intersection of 3 critical areas: (1) the current status of the physical therapist–physical therapist assistant relationship, (2) the applicability of Watts' framework of task analysis and division of responsibility to contemporary practice, and (3) suggestions for promoting intentional dialogue within the profession to determine how to educate and advocate for the delivery of care by physical therapist–physical therapist assistant teams that meets societal needs.

Physical Therapist–Physical Therapist Assistant Relationship

Several documents exist to assist the physical therapist and physical therapist assistant in implementing an efficient team approach. Critical resources include: (1) jurisdictional practice acts for physical therapists and Physical therapist assistants, (2) professional and ethical documents for both provider types[7–12], and (3) knowledge of physical therapist assistant education/scope of work.[13,14]

Conflict often exists between individuals possessing different status within the same field.[13] Tension between physical therapists and physical therapist assistants may be related to inappropriate usage, growth of accredited physical therapist assistant programs, number of physical therapist assistant graduates, inadequate advancement opportunities for physical therapist assistants, and the American Physical Therapy Association (APTA) membership by physical therapist assistants, which has historically been limited.[13]

Attitudes and perceptions of the roles and responsibilities developed by physical therapists and physical therapist assistants towards each other originate during the didactic phase of the educational process, continue to evolve during clinical education experiences, and solidify on entering the workforce. Physical therapist students must possess the skills to collaborate, supervise, and direct the

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physical therapist assistant in various clinical settings in a manner that optimizes the patient's health care experience.[10]

Confusion exists among physical therapists and physical therapist assistants with respect to division of labor, scope of work, and level of supervision and may result in inappropriate utilization of physical therapist assistants.[6,13,15] Improper utilization of physical therapist assistants may decrease patient outcomes and service use in certain settings[16] and increase disciplinary incidents.[17]

We maintain that several factors have contributed to this knowledge gap and resulting provider conflict:

1) Current curricula: Physical therapist education programs were not required by the Commission on Accreditation in Physical Therapy Education (CAPTE) to provide curricular content regarding supervision of the physical therapist assistant until 2007.[13] As a result, the physical therapist assistant role was not featured as an element integral to physical therapist education and the provision of patient care.
2) Learner outcomes: The CAPTE academic elements that inform education do not provide outcomes or criteria to guide assessment of a successful physical therapist–physical therapist assistant relationship.
3) Lack of clear roles: Beyond the mechanics outlining the physical therapist–physical therapist assistant team approach,[13,14] qualitative elements that comprise a successful relationship such as effective communication, flexibility, trust, and positive attitudes are hard to define and measure and yet critical to successful provider interaction. These skills are critical to help manage situations where roles may be muddy, uncertain, or in conflict, such as when a physical therapist assistant has more practical experience in a clinical setting than a newly graduated physical therapist.
4) Assessment limitations: Only one item assessing the competence of physical therapist students' direction and supervision of personnel exists on the clinical performance instrument (CPI).[18] Two skills related to working with physical therapists exist on the physical therapist assistant CPI.[19]
5) Reimbursement issues: Consideration of how to appropriately bill for physical therapist assistant services across the physical therapist practice space. Although the physical therapist bills for services, debate continues regarding Medicare/Medicaid modifiers related to billing for physical therapist assistant's services. Examination of how access to physical therapist assistant services is impacted by billing structures is warranted.[20]

Table 1 summarizes the CAPTE and CPI elements pertaining to evaluation of the physical therapist–physical therapist assistant relationship.

We believe these factors underscore the need for greater commitment by the profession, especially stakeholders in education, to enhance curricular content that guides the development of effective physical therapist–physical therapist assistant teams.

Watts' Approach to the Division of Responsibility and Level of Supervision

Watts utilized sociological theory[21] to describe the interplay of clinical and psychosocial skills. She noted that physical therapists were reluctant to "relinquish" clinical tasks to assistants or aides because it required a shift from direct patient care to managing an "unfamiliar category of worker." Watts believed the process for dividing responsibility lacked clarity and limited consensus existed regarding the level and type of supervision of ancillary personnel. Watts proposed overarching principles for change that required physical therapist services be in adequate supply, of quality on par with current professional knowledge, and cost efficient. Ahead of her time, Watts recognized, although not specifically naming it, that the Triple Aim of the patient-centered experience, improving health, and reducing costs was dependent on achieving the *fourth* aim of an effective provider relationship.[22]

Watts proposed a systematic procedure for allocating responsibility that was guided by important questions:

1. How can a logical, effective, and satisfying division of labor be established among personnel at different levels within the field?
2. Does realignment of responsibility reduce the variety of tasks done by the physical therapist?
3. Can delegation of certain tasks to the physical therapist assistant be done as well as or better than the physical therapist?

Ultimately, Watts was concerned that patient-centered care avoid fragmentation due to hand-offs to multiple providers. She noted division of labor is complex and occurs within the murky context of practice. Also, she observed delegation of responsibility is difficult or unsafe if the clinician separates thinking and doing. To accommodate these notions, Watts identified 5 major "determinates" to inform decision-making and delegation activities. We argue these 5 determinates continue to be relevant for contemporary practice (Tab. 2). What can the profession do to ensure students are considering these determinates during clinical decision-making that involves the interdependence of the physical therapist and physical therapist assistant?

Future Directions for Education and Research

A paucity of research exists that examines educational models designed for clarification of provider roles and for effective collaboration.[5,15] Many of the concerns outlined by Watts, such as division of labor, delegation, and worker satisfaction, persist today.

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Table 1.
CAPTE and CPI Elements[a]

Elements Pertaining to Physical Therapist Education	Elements Pertaining to Physical Therapist Assistant Education
CPI-PT	**CPI-PTA**
Financial resources Participates in the financial management (budgeting, billing and reimbursement, time, space, equipment, marketing, public relations) of the physical therapist service consistent with regulatory, legal, and facility guidelines	Communication Communicates with clinical instructor and supervising physical therapist to: • Review physical therapist examination/evaluation and plan of care • Ask questions to clarify selected interventions • Report instances when patient's current condition does not meet safety parameters established by physical therapist (eg, vital signs, level of awareness, red flags) • Report instances during interventions when patient safety/comfort cannot be assured • Report instances when comparison of data indicates that patient is not demonstrating progress toward expected goals established by physical therapist in response to selected interventions • Report when data comparison indicates that patient response to interventions has met expectations established by physical therapist • Report results of patient intervention and associated data collection
Direction and supervision of personnel Directs and supervises personnel to meet patient's goals and expected outcomes according to legal standards and ethical guidelines	
	Clinical problem solving • Seeks clarification of plan of care and selected interventions from clinical instructor and/or supervising physical therapist • Demonstrates ability to determine when clinical instructor and/or supervising physical therapist needs to be notified of changes in patient status, changes or lack of change in intervention outcomes, and completion of intervention expectations (ie, goals have been met)
CAPTE PT standards	**CAPTE PTA standards**
Prognosis and plan of care **7D25** Determine those components of plan of care that may or may not be directed to physical therapist assistant based on (a) needs of patient/client, (b) role, education, and training of physical therapist assistant, (c) competence of individual physical therapist assistant, (d) jurisdictional law, (e) practice guidelines policies, and (f) facility policies	Plan of care • **7D17** Communicate an understanding of plan of care developed by physical therapist to achieve short- and long-term goals and intended outcomes • **7D20** Report any changes in patient/client status or progress to supervising physical therapist • **7D22** Contribute to discontinuation of episode of care planning and follow-up processes as directed by supervising physical therapist
Management of care delivery **7D29** Delineate, communicate, and supervise those areas of plan of care to be directed to physical therapist assistant	

[a]Related to the physical therapist–physical therapist assistant relationship. CAPTE = Commission on Accreditation in Physical Therapy Education; CPI-PT = clinical performance instruction-physical therapist; CPI-PTA = clinical performance instrument-physical therapist assistant.

Qualitatively Define the Physical Therapist–Physical Therapist Assistant Relationship

A first step would be to refine and add context to the definition of the physical therapist–physical therapist assistant relationship. Some educators define the relationship through a synthesis of the Normative Model,[7,10] The Guide to Physical Therapist Practice,[12,23] national teamwork definitions,[14] and jurisdictional practice acts. A new direction qualitatively exploring the attributes of high-performing physical therapist–physical therapist assistant teams might inform how the attributes could be taught, assessed, and operate in clinical practice.[24]

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Table 2.
Application of Watts' Five Determinants of Separability as a Tool to Determine Appropriate Direction of a Task to a Physical Therapist Assistant. Example: Ambulation Training

Watts' Five Determinants of Separability	DPT Decision-Making Thought Process Related to Delegation	
	Patient Example #1[a]	Patient Example #2[b]
1) *Predictability of consequences* refers to level of uncertainty contained within a specific patient treatment scenario. Level of uncertainty is combined with decision-maker's confidence regarding consequences of action	Moderate level of predictability for gait training	Low level of predictability: less able to predict consequences of gait training secondary to uncertainty of impulsivity
2) *Stability of the situation* concerns how much or how quickly change would occur in a patient condition based on a treatment decision	Moderate level of stability: risk of fall; gait training intensity could affect CHF, HTN	Unstable: heightened risk of fall due to impulsivity
3) *Observability of basic indicators* is ease of monitoring and perception of a patient response to a treatment	Past medical history: multiple factors to be monitored	Past medical history: unremarkable
4) *Ambiguity of basic indicators* involves the difficulty of interpretation of key patient issues and if issues might be confused with other factors	Ambiguous: issue of congestive heart failure	Unambiguous
5) *Criticality of results* weighs seriousness of consequences due to a poor choice of goal or method.	High criticality/seriousness of consequences	High criticality/seriousness of consequences

[a]Patient #1: 48-year-old female; diagnosis: right hemorrhagic anterior cerebral artery cerebral vascular accident; past medical history: hypertension (HTN), congestive heart failure (CHF), meniscus repair 2010; precautions: falls risk.
[b]Patient #2: 28-year-old female; diagnosis: diffuse axonal injury traumatic brain injury due to a motor vehicle accident; past medical history: right anterior cruciate ligament repair 2008; precautions: falls risk, impulsive.

Intentionally Introduce the Physical Therapist Assistant Profession Early Within Physical Therapist Curricula

Direction and supervision of physical therapist assistants is required for physical therapist practice. Intraprofessional work with physical therapist assistants must be ingrained in the "culture" of physical therapist education. Educators must go beyond checking off the CAPTE curricular requirement box, which fosters parallel play versus collaborative interdependence. Intraprofessional team building is important for these providers' success.

We advocate for educational approaches that *intentionally* and longitudinally partner physical therapist and physical therapist assistant students in academic and clinical settings to promote continuity of education. Opportunities for collaboration through increased contact[25] enables students to consider new perspectives, foster role appreciation,[26] and challenge assumptions, stereotypes, and negative attitudes. An integrated model of intraprofessional education can potentially improve role clarity and teamwork in students and establish a foundation for the future of education and practice.

Curriculum touch points can be identified for both disciplines and include instruction about teamwork elements, including communication, trust, and collaboration. Education should include knowledge regarding scope of work, roles/responsibilities, ethics, clinical problem solving, and supervision/direction for best utilization of respective skill sets. Important educational outcomes must be delineated and synchronized with meaningful assessment points.

Interactive educational approaches that incorporate shared learning activities can positively impact students' attitudes toward direction and supervision, preparation for effective communication, and respect and valuing of the physical therapist–physical therapist assistant team.[26] "…the outstanding feature of a system of shared responsibility such as that proposed here is the very high degree of interdependency it involves."[1(p34)]

Advocate for Fair Payment Structures for Physical Therapist Assistants

Due to the demand for physical therapist services, physical therapist assistants are a crucial member of the care delivery team. While physical therapist assistants work under the direction and supervision of physical therapists, APTA must continue to advocate with private insurers, Tricare, Medicare, and Medicaid agencies to allow for fair and appropriate reimbursement that appropriately compensates for physical therapist assistant services, legitimizes the role of the physical therapist assistant, and helps manage the demand for physical therapist services.

Conclusion

Action is needed to implement best methods for educating physical therapist and physical therapist assistant students to optimize provider roles, manage conflict, and produce

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effective physical therapist–physical therapist assistant teams. APTA must continue to advocate for fair payment structures for physical therapist assistants that promote access to services that are in demand. Almost 50 years ago, Watts observed that the demand for physical therapists required a practice change that included utilization of physical therapist assistants. The demand for physical therapist services will continue due to increased access to services, population needs, and evolving scopes of practice.

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