

2016
**MOVEMENT
SYSTEM
SUMMIT**



American Physical Therapy AssociationSM

Alexandria, VA • December 8-10



TABLE OF CONTENTS

WELCOME	3
MOVEMENT SYSTEM DEFINITION AND DIAGRAM	4
PARTICIPATION GUIDELINES	6
SUMMIT OBJECTIVES	7
SUMMIT AGENDA	8
SESSION INFORMATION	13
ACTION PLAN	29
GLOSSARY	33



WELCOME



American Physical Therapy Association..

Dear Movement System Summit Attendees:

Welcome to APTA's 2016 Movement System Summit!

We are excited that you are here with us in Alexandria, Virginia, for the Movement System Summit, which promises to be one of the American Physical Therapy Association's (APTA) most transformative events.

In 2013, APTA adopted an inspiring new vision, "Transforming society by optimizing movement to improve the human experience." 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 first guiding principle of the new vision is "identity," and it states that "The physical therapy profession will define and promote the **movement system** as the foundation for optimizing movement to improve the health of society." By articulating the PT's unique role in diagnosing and managing risk of and intervention for movement system disorders, it is our goal to advance towards the reduction of unwarranted variations in practice and, in turn, to achieve consistent positive outcomes for specific diagnoses to enhance the value of the services we provide.

Over the last 3 years, APTA has led efforts not only to define the "movement system," but to lay the building blocks for the future. By better characterizing physical therapists as movement experts, we seek to solidify our professional identity within the medical community and society.

One primary goal for this Summit is to develop an action plan for integrating the movement system concepts into physical therapist practice, education, and research. This roadmap will be forwarded to APTA's Board of Directors for review and to determine action. Your active participation during the event, and your willingness to be a champion of the movement system after the Summit, are paramount in reaching our goal.

I look forward to meeting and speaking with each of you throughout the Summit. Thank you for all of your tireless efforts to improve and move the physical therapy profession forward.

Best Regards,

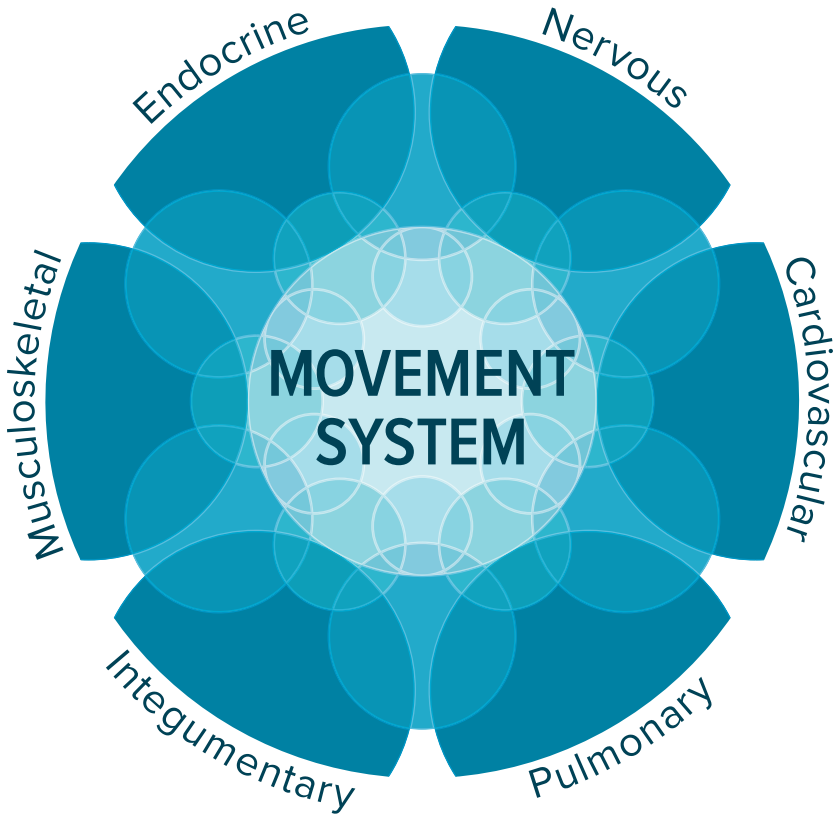
Lisa Saladin, PT, PhD

Catherine Worthingham Fellow of the American Physical Therapy Association
Fellow of the Association of Schools of Allied Health Professions

Vice President, APTA

Board Chair, Movement System Task Force

The movement system is the term used to represent the collection of systems (cardiovascular, pulmonary, endocrine, integumentary, nervous, and musculoskeletal) that interact to move the body or its component parts.



PARTICIPATION GUIDELINES

1. I understand that the outcome of the Summit will be the development of an action plan for integrating the movement system into physical therapist practice, education, and research.
2. I will listen carefully and strive to understand the ideas and/or positions of other participants before I respond to those ideas and/or positions.
3. I agree that consideration of any topic should begin with a common understanding of the larger vision and interests of the profession.
4. I understand that the work of the Summit will be forwarded to APTA's Board of Directors, which has the responsibility to review and determine action on any and all draft documents.
5. I will act in a manner that acknowledges the value of every participant stakeholder. Moreover, I will value each participant's contribution on its merits, not on the basis of power derived solely from position, forcefulness, degrees, or years of experience.
6. I agree to be an active participant during the Summit, whether I agree or disagree, and refrain from being distracted by my cell phone or email. I will monitor my participation to ensure that I am not monopolizing the conversation and that others have the opportunity to contribute to the discussion.
7. I agree to be a champion for the movement system and will submit a personal/component action plan and recommendations at the conclusion of the Summit. I will provide feedback on obstacles and successes of the action plan in a report at various intervals after the Summit.

SUMMIT OBJECTIVES

1. Describe the history and development of the term “movement system” as the identity principle with APTA’s new vision.
2. Develop a common understanding of the definition of the movement system and the role of physical therapy in the movement system.
3. Identify the potential benefits of integrating the movement system in physical therapist practice, education, and research.
4. Discuss the movement system as it relates to the ICF language and the *Patient/Client Management Model in Guide to Physical Therapist Practice 3.0*.
5. Begin to identify essential activities that should be included in the patient or client examination for assessment of movement performance, and the criteria for how to measure these.
6. Agree upon criteria for adopting or promoting movement system diagnostic labels.
7. Describe the implications of using movement system diagnostic labels, including selection of treatment options, communication with other professionals, clinical documentation, reimbursement, education, and research.
8. Develop an action plan for the integration of the movement system into practice, education, and research. This document will be a recommendation to APTA’s Board of Directors.

THURSDAY, DECEMBER 8

6:30 pm–7:30 pm Registration, reception, meet and greet

Session 1: Why Are We Here and What Do We Hope to Achieve?

Objectives:

- Explain the history of the movement system and its relationship to the APTA Vision.
- Describe the Identity principle of the Vision.

7:30 pm–7:45 pm **Welcome** – Sharon Dunn, PT, PhD, Board-Certified Clinical Specialist in Orthopaedic Physical Therapy

Summit Overview – Lisa Saladin, PT, PhD, Catherine Worthingham Fellow of the American Physical Therapy Association

7:45 pm–8:00 pm Movement System Inspiration – Christopher Powers, PT, PhD, Catherine Worthingham Fellow of the American Physical Therapy Association

8:00 pm–8:30 pm The History of the Movement System as the Identity Principle of the APTA Vision – Lisa Saladin, PT, PhD, Catherine Worthingham Fellow of the American Physical Therapy Association

8:30 pm–9:00 pm Session 1 roundtable discussion:

Question:

1. If all physical therapists were movement system experts, and the public, our colleagues, and all other stakeholders recognized us that way; what positive changes would we see in the profession of physical therapy?

FRIDAY, DECEMBER 9

7:30 am–8:30 am Breakfast

Session 2: What Is Our Understanding of the Movement System?

Objectives:

- Identify the relationship of the movement system language to the current language of the ICF, *Guide to Physical Therapist Practice 3.0*, (Patient/Client Management Model), and APTA House of Delegates policies and positions.
- Explain and support the application and implementation of the movement system within and across settings.
- Articulate participants' role as movement system expert champions.

8:30 am–8:35 am Video

8:35 am–8:50 am Setting the stage for session 2 – Cynthia Coffin Zadai, PT, DPT, MS, Catherine Worthingham Fellow of the American Physical Therapy Association

8:50 am–10:25 am Session 2 roundtable discussion:

Questions: (Each table discusses all 3 questions)

1. What is your understanding of the movement system?
2. How do you see the Patient/Client Management Model interfacing with the movement system?
3. Where are you currently in your role as a movement system expert in practice, teaching, and research?

10:25 am–10:45 am Break

10:45 am–noon Group report and discussion

Noon–12:45 pm Lunch

Session 3: What Essential Components of Movement Analysis Should Be Included in Our Examination?

Objectives:

- Identify essential components of movement analysis that should be included in the patient/client examination for assessment of movement performance.

- 12:45 pm–2:00 pm** How the Movement System Informs my Patient Assessment – Christopher Powers, PT, PhD, Catherine Worthingham Fellow of the American Physical Therapy Association; and Patty Scheets, PT, DPT, MS, Board-Certified Clinical Specialist in Neurologic Physical Therapy
- 2:00 pm–2:30 pm** Session 3 roundtable discussion:
Question (review results from prework survey):
1. What are the essential activities that are part of a movement analysis?
- 2:30 pm–2:50 pm** Break
- 2:50 pm–3:20 pm** Group report and discussion: question 1
- 3:20 pm–4:30 pm** **Question:**
2. What do you look for during each activity and what criteria do you use to measure?
- 4:30 pm–4:50 pm** Break
- 4:50 pm–5:30 pm** Group report and discussion: question 2
- 5:30 pm–5:50 pm** Wrap-up
- 6:30 pm** Individuals assigned to specific groups and restaurants for dinner

SATURDAY, DECEMBER 10

6:30 am–7:30 am Breakfast

Session 4: What Is a Movement System Diagnosis?

Objectives:

- Agree upon criteria for movement system diagnostic labels.
- Describe the implications of using movement system diagnostic labels, including selection of treatment options, communication with other professionals, clinical documentation, reimbursement, education, and research.

7:30 am–8:30 am

Shoulder “Impingement”: The Case for Movement System Diagnostic Classification – Paula Ludewig, PT, PhD, Catherine Worthingham Fellow of the American Physical Therapy Association; and Jonathan Braman, MD

8:30 am–9:45 am

Session 4 roundtable discussion:

Questions:

1. Do the proposed criteria that are listed below need to be modified? If so, how? Proposed criteria for movement system diagnostic labels:
 - a. Use recognized anatomical, physiological, movement-related terms to describe the condition or syndrome of the movement system.
 - b. Include, if deemed necessary for clarity, the name of the pathology, disease, disorder, or symptom that is associated with the diagnosis.
 - c. Be as short as possible to improve clinical usefulness.
2. Examples of movement system diagnoses were included in the pre-Summit readings. What are the potential risks and rewards of movement system diagnoses?

SUMMIT AGENDA

9:45 am–10:05 am Break

10:05 am–11:00 am Group report and discussion

Session 5: How Do We Integrate the Movement System Into Practice, Education, and Research?

Objectives:

- Develop an action plan for the integration of the movement system into practice, education, and research. This document will be a recommendation to APTA's Board of Directors.

11:00 am–noon

Perspectives From Practice, Education, and Research – Barbara Norton, PT, PhD, Catherine Worthingham Fellow of the American Physical Therapy Association; Edee Field-Fote, PT, PhD, Catherine Worthingham Fellow of the American Physical Therapy Association; and Michael Voight, PT, ATC, DHSc, Board-Certified Sports and Orthopedic Clinical Specialist, Certified Strength and Conditioning Specialist, Catherine Worthingham Fellow of the American Physical Therapy Association

Noon–12:30 pm

Lunch

12:30 pm–2:00 pm

Session 5 roundtable discussion: an action plan for the future

Questions (review the draft action plan):

1. Are there any critical action items missing in practice, education, and research that must be completed to move the movement system forward?
2. Are there any items that you believe should be deleted from the list because they are either not important or not feasible?

2:00 pm–2:20 pm

Break

2:20 pm–4:00 pm

Group report and discussion

Closing Session: Where Are We and What Are Our Next Steps?

4:00 pm–4:15 pm

Summary and action steps

Session 1: Why Are We Here and What Do We Hope to Achieve?

Prereadings:

1. APTA Vision and Strategic Plan
2. *Physical Therapist Practice and the Human Movement System*

Objectives:

- Explain the history of the movement system and its relationship to the APTA Vision.
- Describe the identity principle of the Vision.

Background:

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 first principle is **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.”

After APTA’s House of Delegates adopted a new vision statement for the physical therapy profession, the association’s Board of Directors recognized that in order for the physical therapy profession to achieve the vision as articulated by its guiding principles it would be necessary to integrate consistent application of the “movement system” (as mentioned in the guiding principle on Identity) in physical therapist practice, education, and research.

Before that could happen, it was important to define the concept of the movement system. The Board, therefore, convened a work group to develop that definition.

After feedback from many members, the definition of the movement system has undergone revision to increase the clarity: the movement system is the term used to represent the collection of systems (cardiovascular, pulmonary, endocrine, integumentary, nervous, and musculoskeletal) that interact to move the body or its component parts.

The physical therapist’s role in the movement system remains as the following:

Physical Therapist Practice and the Movement System

Movement is a complex behavior within a specific context.

- Physical therapists provide a unique perspective on purposeful, precise, and efficient movement across the lifespan based upon the synthesis of their distinctive knowledge of the movement system and expertise in mobility and locomotion.
- Physical therapists examine and evaluate the movement system (including diagnosis and prognosis) to provide a customized and integrated plan of care to achieve the individual’s goal-directed outcomes.
- Physical therapists maximize an individual’s ability to engage with and respond to his or her environment using movement-related interventions to optimize functional capacity and performance.

Session 1 roundtable discussion

Question:

1. If all physical therapists were movement system experts, and the public, our colleagues, and all other stakeholders recognized us that way, what positive changes would we see in the profession of physical therapy?

NOTES

Session 2: What Is Our Understanding of the Movement System?

Prereadings:

1. *Guide to Physical Therapist Practice 3.0*: Glossary.
2. *Guide to Physical Therapist Practice 3.0*; Patient/Client Management Model
3. World Health Organization: ICF Beginners Guide.
4. Movement system white paper by the movement system board work group members (2015).

Objectives:

- Understand the relationship of the movement system language to the current language of the ICF, *Guide to Physical Therapist Practice 3.0*, (Patient/Client Management Model), and APTA House of Delegates policies and positions.
- Understand and support the application and implementation of the movement system within and across settings.
- Be able to clearly articulate participants' role as movement system expert champions.

Background:

During the early 1990s as state legislators turned their attention to rising health care costs, new focus was placed on the “unwarranted variation” in health care practice and the inability to identify “standard care” across patient groups and practice settings. In February 1992, APTA’s Board of Directors embarked on a process to determine if practice parameters could be developed for the physical therapy profession.¹

During the next 5 years, volumes I and II of the *Guide to Physical Therapist Practice (Guide)* were developed to serve the following purposes: (1) to describe physical therapist practice in general using the disablement model (ICIDH/WHO) as the basis; (2) to describe the roles and settings in which PTs practice; (3) to standardize terminology used in physical therapist practice; and (4) to delineate the components of practice and practice patterns in a standardized way. In 1997 APTA’s Board of Directors and the House of Delegates approved the conceptual framework of the *Guide*, and the first edition was published in *Physical Therapy*, November 1997.

Since that time, the World Health Organization has evolved the Disablement Model to become the *International Classification of Functioning, Disability and Health* (ICF), published in 2001.² The ICF classification system provides a standardized language and framework for the description of health and

related components of well-being. The systematic organization of health domains is based on 2 groupings: body structures and functions, and activities and participation. The evolution in the ICF's classification system and language has continued to be integrated into the second and now the third edition of the *Guide*, as directed by the House of Delegates in 2008.³

Careful review of the third edition of the *Guide*'s Patient/Client Management Model and the ICF's chapter classifications of structure, function, activities, participation, and environmental factors highlight the many opportunities for identifying structures, functions, actions, and interactions of the movement system within these standardized frameworks.

Questions:

1. What is your understanding of the movement system?
2. How do you see the Patient/Client Management Model interfacing with the movement system?
3. Where do you see yourself currently in your role as a movement system expert in practice, teaching, and research?

References:

1. *Guide to Physical Therapist Practice*. *Phys Ther*. 1997;77:1163–1650.
1. *International Classification of Functioning, Disability and Health*. Geneva, Switzerland: World Health Organization; 2001.
2. *Guide to Physical Therapist Practice 3.0*.

NOTES

Session 3: What Essential Components of Movement Analysis Should Be Included in Our Examination?

Prereadings:

1. *Guide to Physical Therapist Practice 3.0* – Principles of Patient/Client Management and Systems Review; Physical Therapist Examination and Evaluation: Tests and Measures (Motor Function).
2. Slide show labeled: NEXT 2015 – Session 1 slides 5-1-15, NEXT 2015 Presentations.
3. Scheets PL, Sahrman SA, Norton BJ. Use of movement system diagnoses in the management of patients with neuromuscular conditions: a multiple-patient case report. *Phys Ther.* 2007;87:654–669.

Objectives:

- Identify the essential activities that should be included in the standardized patient/client examination for assessment of movement performance.
- Identify the criteria for analyzing these essential activities performed during the movement analysis.

Background:

Modern day physical therapists began their “practice” in the late 1800s–early 1900s as “reconstruction aides.”¹ History texts describe these women as nurses trained in massage and exercise. The focus of physical therapist management was on the application of treatments to individuals with war wounds that were primarily musculoskeletal disorders. Physical therapist treatment programs expanded during the first half of the 20th century to include application of techniques to patients with polio; a neuromuscular disease with significant musculoskeletal, pulmonary, and integumentary consequences.² As the practice of physical therapy grew over the next 20 to 30 years to include management of patients with an ever-broadening array of pathological disorders, the treatment methods needed to assist these individuals also became more complex and specific for differing populations. At this early stage of physical therapist development, the examination techniques leading to a diagnosis of movement-related disorders and the prescribing of interventions for their management was the sole responsibility of physicians. The examination procedures focused predominantly on manual muscle testing and range of motion.

Between the 1950s and the 1980s there was exponential growth and development in the physical therapy profession, as our education programs evolved to being university-based and the American Medical Association (AMA) no longer dictated our educational standards; state licensure acts grew to include a scope of practice; and practice settings

and patient populations became more diverse as our professional association focused on delineating specialty areas of practice.³ The studies performed by the specialty sections in the 1980s and 1990s documented that in specifically studied populations, physical therapist clinical practice was advanced and specialized and demonstrated clearly that PTs were performing detailed examinations on their patients, utilizing a wide array of measurement techniques. However, a review of the early “Advanced Competency” documents also easily shows that although there is some examination overlap across specialties, there is no consistent set of tests performed by all PTs as “standard practice” to either grossly or specifically examine movement.

In 1997, the development process required for creation and publication of the *Guide to Physical Therapist Practice* brought physical therapists much closer to identifying and recognizing the commonalities needed across all patient populations to perform an effective “physical therapist examination.”⁴ The examination phase of the Patient/Client Management Model was initially, and is currently, described in 3 parts: History, Systems Review, and Tests and Measures. The history is the systematic collection of data related to why the patient or client is seeking the services of a PT. The systems review is a brief or limited exam of the anatomical and physiological status of the systems, (comprising the movement system) to note how the identified components affect the ability to initiate, sustain, and modify purposeful movement for performance of an action, task, or activity that is pertinent to function. These first 2 steps of the examination process are performed with all patients. The third component of the exam is the tests and measures that are selected by the PT as appropriate for an individual patient.

As this construct of examination has been reviewed within the context of the movement system, questions have been raised about the precise and standardized examination of movement. Should the current examination be revised to include a generic movement assessment consisting of a standard set of observations at rest (eg, supine, sitting, standing), or when moving from rest to activity (eg, sit to stand, pull to stand), or based on the age of the individual (eg, developmental sequence, based on chief complaint)? If so, what should it look like? What essential activities and qualities of movement performance are necessary to examine and analyze movement to develop an individualized movement system diagnosis, prognosis, and treatment plan for any given patient?

Questions:

1. Review results from prework survey. What are the essential activities that should be part of a standard movement analysis?
2. What do you look for during the performance of each essential activity, and what criteria do you use to measure and report out findings?

References:

1. American Physical Therapy Association. APTA History web page.
2. Today's Physical Therapist: A Comprehensive Review of a 21st-Century Health Care Profession. American Physical Therapy Association; 2011.
3. American Board of Physical Therapy Specialties.
4. *Guide to Physical Therapist Practice 3.0.*

NOTES

Session 4: What Is a Movement System Diagnosis?

Prereadings:

1. Coffin-Zadai CA. Disabling our diagnostic dilemmas. *Phys Ther.* 2007;87(6):641-653.
2. Ludewig PM, Lawrence RL, Braman JP. What's in a name? Using movement system diagnoses versus pathoanatomic diagnoses. *J Orthop Sports Phys Ther.* 2013;43(5):280-283.
3. White DM. Expanding the discussion on movement versus pathoanatomic diagnosis [letter]. *J Orthop Sports Phys Ther.* 2013;43(9):675. *Guide to Physical Therapist Practice 3.0. Patient/Client Management Model.*
4. Norton BJ. Diagnosis dialog: progress report. *Phys Ther.* 2007; 87(10):1270-1273.
5. NEXT 2016 Presentations: Movement System Diagnosis and Practice: Voight ML, Sahrmann SA, Quinn L, Norton BJ. On the APTA Learning Center.

Objectives:

- Agree upon criteria for movement system diagnostic labels.
- Describe the implications of using movement system diagnostic labels, including selection of treatment options, communication with other professionals, clinical documentation, reimbursement, education, and research.

Background:

Two of the take-home messages from the presentation are that at least some of the pathoanatomic diagnoses used by orthopedic surgeons: (a) may not accurately reflect the underlying problem, and (b) certainly do not optimally direct PT intervention. Consequently, performing all of the tests required to diagnose the pathoanatomic condition may not lead PTs to the diagnosis that is most consistent with the types of intervention that are within the scope of their practice. The unanswered question is “What tests and diagnoses should we use?” As a profession, we have been discussing the issue of diagnosis in our literature for about 40 years. Helen Hislop made it possible to begin the discussion when she introduced the term pathokinesiology and urged us to embrace an area of science as the foundation of our profession.¹ Early contributors to the discussion about diagnosis were Eugene Michels (“Mike”) and Steve Rose in the 1980s. Mike wrote about the need to develop classification systems for patients who had experienced a stroke as a means for improving selection of treatment options.² Following in Mike’s footsteps, Steve Rose began a line of research that focused on classification of patients with low back pain, and discussed the importance of diagnostic classification in physical therapy.³ About

the same time, Shirley Sahrman began the discussion about diagnoses related to movement problems.⁴ Soon thereafter, Alan Jette⁵ and Andrew Guccione⁶ raised the issue of classification related to function. Then, in the 1990s, many people worked to achieve consensus on the practice patterns in the *Guide to Physical Therapist Practice*,⁷ but widespread acceptance of the practice patterns as the bases for movement system diagnosis was not achieved. In 2004, Cyndi Zadai basically “called the question” about diagnosis in her John H.P. Maley Lecture.⁸ In response to Cyndi’s “call,” a group of 24 individuals from across the country who represented a wide range of interests and areas of expertise were invited to participate in a Dialog about Diagnosis. In 2006, the group met for 2½ days and discussed a set of questions about diagnosis. The group acknowledged that the term diagnosis can be used to describe both a process and a label, and there is no universally accepted definition of the word diagnosis. The group embraced the concept of the movement system and began working on the task of describing the labels we should use for diagnosis, within the context of the movement system.⁹ The group developed the following set of criteria for naming movement-related conditions:¹⁰

- Use recognized anatomical, physiological, movement-related terms to describe the condition or syndrome of the movement system.
- Include, if deemed necessary for clarity, the name of the pathology, disease, disorder, or symptom that is associated with the diagnosis.
- Be as short as possible to improve clinical usefulness.

Questions:

1. Do the proposed criteria that are listed below need to be modified? If so, how?

Proposed criteria for movement system diagnostic labels:

- a. Use recognized anatomical, physiological, movement-related terms to describe the condition or syndrome of the movement system.
 - b. Include, if deemed necessary for clarity, the name of the pathology, disease, disorder, or symptom that is associated with the diagnosis.
 - c. Be as short as possible to improve clinical usefulness.
2. Examples of movement system diagnoses were included in the pre-Summit readings. What are the potential risks and rewards of movement system diagnoses?

References:

1. Hislop HJ. Tenth Mary McMillan Lecture: The not-so-impossible dream. *Phys Ther.* 1975;55:1069-1080.
2. Michels E. Motor behavior in hemiplegia. *Phys Ther.* 1965;45:759-767.
3. Rose SJ. Description and classification: the cornerstones of pathokinesiological research. *Phys Ther.* 1986;66:379-381.
4. Sahrman SA. Diagnosis by the physical therapist: a prerequisite for treatment. *Phys Ther.* 1988;68:1703-1706.
5. Jette AM. Diagnosis and classification by physical therapists: a special communication. *Phys Ther.* 1989;69:379-381.
6. Guccione AA. Physical therapy diagnosis and the relationship between impairments and function. *Phys Ther.* 1991;71:499-503.
7. *Guide to Physical Therapist Practice.* *Phys Ther.* 1997;77:1163-1650.
8. Coffin-Zadai. Disabling our diagnostic dilemmas. *Phys Ther.* 2007;87:641-653.
9. Norton BJ. Harnessing our collective professional power: diagnosis dialog. *Phys Ther.* 2007;87:635-638.
10. Norton BJ. Diagnosis dialog: progress report. *Phys Ther.* 2007;87:1270-1273.

NOTES

Session 5: How Do We Integrate the Movement System Into Practice, Education, and Research?

Prereadings:

1. Movement System Action Plan (see below)

Objectives:

- Develop an action plan for the integration of the movement system into practice, education, and research. This document will be a recommendation to APTA's Board of Directors.

Background:

In 2014, a movement system Board work group was convened with the charge to define the term “movement system,” and to develop the framework for a short- and long-term plan for promoting and integrating the concept of the movement system into physical therapist practice, education, and research.

The work group developed a focused short-term plan (0-3 years) for integrating movement system into practice, education, and research that requires coordinated oversight and investment of resources by the association, in order for this concept to permeate all aspects of the profession in response to clarifying the professions' identity. The plan was reviewed by the Movement System Task Force, and a draft is presented to the Summit for discussion.

Questions:

1. Are there any critical action items missing in practice, education, and research that must be completed to move the movement system forward?
2. Are there any items that you believe should be deleted from the list because they are either not important or not feasible?

NOTES

MOVEMENT SYSTEM ACTION PLAN

Practice:

- Produce, in detail, the steps required to conduct a movement analysis examination in practice, and develop training videos for the practitioner to implement this examination for the movement system.
- Develop and distribute through APTA's website and other communications examples of models of movement analysis that are happening in practice that use "high and low" technology.
- Ensure that the Outcomes Registry measures align with terminology associated with the movement system. Start the development of diagnostic labels for movement system conditions.
- Advocate for an annual exam that focuses on the movement system over the course of a life span.
- Revise patient satisfaction tools to incorporate questions that ask patients if their PT is adequately addressing the movement problem.
- Revise the *Guide to Physical Therapist Practice 3.0* to reflect the movement system analysis in practice.
- Promote the development, implementation and dissemination of diagnostic classification systems/labels that adhere to the proposed criteria.

Education:

- Develop, implement, and distribute demonstration curricular models in larger and smaller academic institutions that integrate the movement system throughout the curriculum (eg, academic health centers, liberal arts, research institutions, religious affiliated institutions).
- Incorporate movement system content in the Credentialed Clinical Instructor Program and Advanced Clinical Instructor Program courses.

Research:

- Add a PubMed mesh term for movement system that appropriately relates content to the movement system.
- Develop standardized language for instructions to authors to include use of key works and how work relates to the movement system.
- Encourage authors to include "movement system" as a key word in articles.

Communication/Dissemination:

- Promote movement system content at NEXT annually.
- Develop and provide a free webinar continuing education series on the movement system content modules that include:
 - General overview.
 - Movement system analysis across conditions and life spans.
 - Integration of the movement system into curriculum.
 - Examination, diagnosis, and management of movement system conditions across conditions and life span.
- Promote movement system content at APTA National Student Conclave annually.
- Solicit articles on the movement system for distribution in PTNow and journals.
- Add a search term on APTA's website and physical therapy publications using movement system as a key word.
- Include movement system in ScholarOne as a key term for presentations at NEXT in 2018.
- Provide frequent and diverse opportunities to enable members to participate and engage in future movement system activities and dialogues.
- Capture testimonials from PTs, patients, and referral sources talking about outcomes achieved when the focus is on the physical therapist diagnosing movement system conditions, and providing appropriate interventions. Post on APTA's website and through social media.
- Educate consumers about the role of PTs as movement system experts, and what they ought to look for in a PT as part of the health literacy of physical therapy.
- Consumer portal ("Move Forward"): Provide information about the role of PTs in diagnosing and providing interventions for movement system conditions.
- Integrate the movement system throughout APTA's website.

Partnering Initiatives:

- Encourage the sections/academics to continue to be adopters of the movement system, to link this concept to existing clinical practice guidelines, and to integrate the concepts when developing new clinical practice guidelines.

ACTION PLAN

- Encourage sections/academies to promote movement system content at CSM and during other annual meetings.
- Partner with sections/academies to provide content and materials for APTA's Learning Center and professional education (consider MOOCs/ Kahn Academy/LMS system) related to the specific practice areas, to teach directly in their clinics and build a practitioner series.
- Work with external stakeholders to integrate movement system assessment and terminology into electronic health record systems.
- Request that component journals produce a special issue on the movement system.
- Encourage the Education Section to incorporate an introduction to the movement system at their orientation for the new faculty workshop.
- Partner with ACAPT to engage leaders at ELC in a dialogue on the importance of integrating the movement system into education.
- Work with ABPTRFE to integrate the movement system within residency and fellowship education and training.
- Provide an informational session to CAPTE about the movement system.
- Create the Decade of the Movement System (similar to the Bone and Joint Decade) to convene collaborative partners with ACSM, Society of Biomechanics, NIH, CDC, etc., where APTA functions as the organizational hub for this effort in a collaborative interdisciplinary partnership with other designated societies to address the movement system.
- Collaborate with the Foundation and the Section on Research to identify the best mechanisms for integrating the movement system concepts into new research.

NOTES

DEFINITIONS FROM THE *GUIDE TO PHYSICAL THERAPIST PRACTICE 3.0*

Activity

The execution of a task or action by an individual. It represents the individual perspective of functioning.

Activity limitations

The difficulties an individual may have in executing activities.

Body functions

The physiological functions of body systems, including psychological functions.

Body structures

The structural or anatomical parts of the body, such as organs, limbs, and their components, classified according to body systems.

Impairments

Impairments are problems in body function or structure, such as a significant deviation or loss.

Environmental factors

Environmental factors make up the physical, social, and attitudinal environment in which people live and conduct their lives.

Health conditions

Diseases, disorders, and injuries.

Participation

Participation is involvement in a life situation.

Participation restrictions

Participation restrictions are problems an individual may experience in involvement in life situations.

Diagnosis

Diagnostic labels may be used to describe multiple dimensions of the individual, ranging from the most basic cellular level to the highest level of functioning as a person in society. Making a diagnosis requires the clinician to collect and sort data into categories according to a classification scheme, relevant to the clinician who is making the diagnosis. These classification schemes should meet the following criteria:

1. Classification schemes must be consistent with the boundaries placed on the profession by law (which may regulate the application of certain types of diagnostic categories) and by society (which grants approval for managing specific types of problems and conditions).

2. The tests and measures necessary for confirming the diagnosis must be within the legal purview of the health care professional.
3. The label used to categorize a condition should describe the problem in a way that directs treatment options that are within the legal purview of the health care professional, who is making the diagnosis.

Although physicians typically use labels that identify disease, disorder, or condition at the level of the cell, tissue, organ, or system, physical therapists use labels that identify the impact of a condition on function at the level of the system (especially the movement system), and at the level of the whole person.

Physical therapists use a systematic process (sometimes referred to as differential diagnosis) to classify an individual into a diagnostic category. This process includes integrating and evaluating the data that are obtained during the examination, to describe the individual condition in terms that will guide the physical therapist in determining the prognosis and developing a plan of care. Thus, the diagnostic label indicates the primary dysfunctions toward which the physical therapist directs intervention. The diagnostic process enables the physical therapist to verify the needs of each individual relative to similar people who are classified in the same category, while also capturing their unique concerns in meeting those needs in a particular sociocultural and physical environment.

The objective of the physical therapist's diagnostic process is the identification of discrepancies that exist between the level of function that is desired by the individual, and the capacity of the individual to achieve that level. In carrying out the diagnostic process, physical therapists may need to obtain additional information (including diagnostic labels) from other professionals. As the diagnostic process continues, physical therapists also may identify findings that should be shared with other professionals (including referral sources) to ensure optimal care. If the diagnostic process reveals findings that are outside the scope of the physical therapist's knowledge, experience, or expertise, the physical therapist refers the individual to an appropriate practitioner.

Even if the diagnostic process does not yield an identifiable cluster (eg, signs or symptoms, impairments in body functions and structures, activity limitations, or participation restrictions), syndrome, or category, the physical therapist may administer intervention for the alleviation of symptoms and remediation of impairments. As in all other cases, the physical therapist is guided by individual responses to intervention and may determine that a reexamination is in order, and proceed accordingly.

DIAGNOSIS BY PHYSICAL THERAPISTS HOD P06-12-10-09 [AMENDED HOD P06-08-06-07; HOD P06-97-06-19; HOD 06-95-12-07; HOD 06-94-22-35; INITIAL HOD 06-84-19-78] [POSITION]

Physical therapists shall establish a diagnosis for each patient and client.

Prior to making a patient or client management decision, physical therapists shall utilize the diagnostic process in order to establish a diagnosis for the specific conditions in need of the physical therapist's attention.

A diagnosis is a label encompassing a cluster of signs and symptoms commonly associated with a disorder or syndrome or category of impairments in body structures and function, activity limitations, or participation restrictions. It is the decision reached as a result of the diagnostic process, which is the evaluation of information obtained from the patient/client examination. The purpose of the diagnosis is to guide the physical therapist in determining the most appropriate intervention strategy for each patient and client. In the event the diagnostic process does not yield an identifiable cluster, disorder, syndrome, or category, intervention may be directed toward the alleviation of symptoms and remediation of impairments in body structures and function, activity limitations, or participation restrictions.

The physical therapist's responsibility in the diagnostic process is to organize and interpret all relevant information collected. The diagnostic process includes obtaining relevant history, performing systems review, and selecting and administering specific tests and measures.

When indicated, physical therapists order appropriate tests, including but not limited to, imaging and other studies that are performed and interpreted by other health professionals. Physical therapists may also perform or interpret selected imaging or other studies.

In performing the diagnostic process, physical therapists may need to obtain additional information (including diagnostic labels) from other health professionals. In addition, as the diagnostic process continues, physical therapists may identify findings that should be shared with other health professionals, including referral sources, to ensure optimal patient and client care. When the patient or client is referred with a previously established diagnosis, the physical therapist should determine that the clinical findings are consistent with that diagnosis. If the diagnostic process reveals findings that are outside the scope of the physical therapist's knowledge, experience, or expertise, the physical therapist should then refer the patient or client to an appropriate practitioner.

Disease

Health condition. An umbrella term for acute or chronic disease, disorder, injury, or trauma. It also may include other circumstances, such as aging, stress, pregnancy, congenital abnormality, or genetic predisposition.

Disability

An umbrella term for impairments, activity limitations, and participation restrictions. It denotes the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors).

Evaluation

Evaluation is the process by which physical therapists:

- Interpret the individual's response to tests and measures.
- Integrate the test and measure data with other information collected during the history.
- Determine a diagnosis or diagnoses amenable to physical therapist management.
- Determine a prognosis, including goals for physical therapist management.
- Develop a plan of care.

Factors that influence the complexity of the evaluation process include clinical findings, extent of loss of function, social considerations, and overall physical function and health status. The evaluation reflects the chronicity or severity of the current problem, the possibility of multisite or multisystem involvement, the presence of preexisting systemic conditions or diseases, and the stability of the condition. Physical therapists also consider the severity and complexity of the current impairments and the probability of prolonged impairment of body functions and structures, activity limitations, and participation restrictions; living environment; potential destinations at the conclusion of the episode of care; and social support.

Evaluation occurs at the start of care and continues throughout the episode of care to determine the individual's response to interventions and progress toward identified goals.

Examination

The physical therapist's examination includes:

- History (including symptom investigation and review of systems)
- Systems review (a limited examination of the musculoskeletal, neuromuscular, cardiovascular/pulmonary, and integumentary systems)

- Tests and measures

Physical therapists conduct a history, perform a systems review, and use tests and measures in order to describe and/or quantify an individual's need for services. The physical therapist has the responsibility to determine if there is sufficient information to:

- Conclude whether the individual would benefit from physical therapy.
- Develop the plan of care.
- Progress the plan of care based on the individual's response to intervention.

Physical therapists also must determine whether referral to or consultation with another provider is indicated based on the information gathered during the initial encounter with the individual, and during subsequent interactions.

Functioning

An umbrella term for body functions, body structures, activities, and participation. Functioning is the positive interaction between an individual with a health condition and that individual's environmental and personal factors (contextual factors). It comprises activities that an individual identifies as essential to support his or her physical, social, and psychological well-being and to create a personal sense of meaningful living.

Impairments

Problems in the body functions and/or structures as a significant deviation or loss.

Intervention

Intervention is the purposeful interaction of the physical therapist with an individual—and, when appropriate, with other people involved in that individual's care—to produce changes in the condition that are consistent with the diagnosis and prognosis.

Referral

The physical therapist may:

- Refer an individual to another provider and conclude care, or not develop a plan of care.
- Refer an individual to another provider and continue the plan of care at the same time.
- Receive an individual referred from another provider who chooses not to continue treating the individual.
- Receive an individual from another provider who continues to treat the individual (if the physical therapy episode of care is ongoing, the physical therapist shares responsibility for the individual).

Screening

Physical therapists conduct preliminary screenings to determine the need for (1) primary, secondary, or tertiary prevention services; (2) further examination, intervention, or consultation by a physical therapist; or (3) referral to another practitioner. Candidates for screening generally are not individuals currently receiving physical therapist services. Screening is based on a problem-focused, systematic collection and analysis of data.

Examples of the prevention-screening activities in which physical therapists engage include:

- Identification of lifestyle factors (eg, amount of exercise, stress, weight) that may lead to increased risk for serious health problems.
- Identification of children who may need an examination for idiopathic scoliosis.
- Identification of elderly individuals in a community center or nursing home who are at high risk for falls.
- Identification of risk factors for neuromusculoskeletal injuries in the workplace.
- Pre-performance testing of individuals who are active in sports.



APTA

American Physical Therapy Association.