Orthopaedic Manual Physical Therapy

Description of Advanced Specialty Practice

American Academy of Orthopaedic Manual Physical Therapists

2018

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This document was prepared by the members of the American Academy of Orthopaedic Manual Physical Therapists (AAOMPT) and has been approved by the AAOMPT Executive Board.

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Introduction

The American Academy of Orthopaedic Manual Physical Therapists (AAOMPT) is a national professional organization that represents physical therapists with clinical practice, education, and/or research interests in orthopaedic manual physical therapy (OMPT). The AAOMPT mission is to "*serve its members by promoting excellence in orthopaedic manual physical therapy practice, education and research, and by collaboration with national and international associations.*"
In 1998, the AAOMPT published the first Description of Advanced Clinical Practice (DACP) for OMPT and it was expected that a significant revision would be appropriate in 10 years. The document underwent significant revision in 2008 and its title was standardized to "Description of Advanced Specialty Practice (DASP)." The plan to revalidate the DASP every 10 years led to development of this 2018 edition.

Purposes of the DASP

The purpose of the DASP is to provide an evidence-informed, peer-supported description of OMPT practice that guides and informs the development and assessment of OMPT fellowship programs. The DASP may also:

1. Provide a resource for practitioners and fellowship program directors for curriculum planning to meet minimum educational standards.
2. Serve as a resource for individual practitioners in setting professional development goals.
3. Assist employers in working with PT clinicians to develop performance assessments and professional development plans.
4. Describe the practice of OMPT to individuals outside of the PT community such as other health care providers, third party payers, potential patients, and other stakeholders.

2018 DASP Revalidation/Revision Process

In January 2016, the AAOMPT created a task force and a content expert panel to revise the DASP that would go into effect in 2018. The DASP Task Force met by teleconference in March and April, and employed a consultant in May 2016. The Task Force and the consultant met in September 2016 at Bellarmine University in Louisville, Kentucky. A survey was developed with input from the DASP Content Expert Panel to gather data regarding current OMPT practice. A pilot survey was sent to program directors of APTA (American Physical Therapy Association)-accredited OMPT programs. With that input, the survey was finalized and sent to Fellows of the AAOMPT.

The survey response rate was 42%. The Task Force analyzed the survey data and updated the Description of Advanced Specialty Practice (DASP) for OMPT based on the results. The DASP was submitted to the American Board of Physical Therapy Residency and Fellowship Education (ABPTRFE) to form the Description of Fellowship Practice. Final editing was completed in fall 2018 by the Task Force and Content Expert Panel.

Organization of the DASP Document

Chapter 1 provides a general description of OMPT practice and briefly describes how one becomes an advanced practitioner in this area of specialty practice. Chapter 2 describes clinical practice and the dimensions of OMPT practice. Chapter 3 presents a patient case vignette designed to bring these dimensions to life. The case vignette provides insight into the level of clinical decision-making expected of an advanced practitioner. The OMPT practitioner is identified not only as one with advanced clinical skills, but also as having high professional standards. Chapter 4 illustrates professional dimensions associated with an advanced practitioner. For educators and those interested in investigating the pursuit of fellowship education, Chapter 5 lists the foundational knowledge underpinning OMPT practice. The inclusion of objectives tied to evidence-informed practice in Chapter 6 underscores the commitment to the pursuit of this practice paradigm. These objectives relate not only to levels of clinical practice expected of the advanced practitioner, but also to what content is taught and how it is taught in the fellowship programs.
Chapter 7 completes our document by providing the reader with a description of the steps associated with the document's development. Lastly, appendices are included to assist the reader by defining terms, clarifying concepts, providing sources of related information, and presenting a historical overview of the AAOMPT as an organization.

Chapter 1: Description of Advanced Specialty Practice—An Overview

Intended Audience

The following description of orthopaedic manual physical therapy **(**OMPT) is intended for stakeholders other than OMPT practitioners, including other health care providers, third party payers, and potential patients/clients.

What is OMPT?

Orthopaedic manual physical therapy is an advanced specialty area of physical therapy practice that is based on manual examination and treatment techniques integrated with exercise, patient education, and other physical therapy modalities to address pain, loss of function, and wellness. Early, consistent, and skillful manual physical therapy, combined with exercise and patient education, is central to the OMPT therapist's practice. Advanced examination, communication, and decision-making skills that are built on the foundations of professional and scientific education facilitate the provision of effective and efficient care. Practitioners of OMPT provide patient management, consult with other health care providers regarding simple as well as complex neuromusculoskeletal (NMS) conditions, and provide recommendations and interventions in the area of health and wellness.

Conditions Commonly Treated by OMPT Practitioners

Orthopaedic manual physical therapists treat acute and chronic symptomatic conditions in all body regions including the head, neck, back/torso/pelvis, arms/hands, and legs/feet.

Why Choose OMPT?

By selecting an OMPT-trained practitioner, a patient will receive optimal care that is effective and fiscally responsible. This is particularly important if the patient has limited resources, has health insurance that only covers limited visits, is seeking conservative treatment that may preclude or delay the need for surgery, or is seeking treatment to enhance his/her outcomes should surgery be required.

When someone suffers from a NMS disorder, an exercise and movement re-education program may be sufficient to restore full pain-free movement, function, and return to full activity. However, in some cases, soft-tissue and joint restrictions are present, resulting in these same interventions being painful, or worse, aggravating to the condition. In these instances, an OMPT practitioner will conduct a thorough examination and can provide hands-on techniques to improve mobility, reduce pain, and restore normal function of the soft tissues and joints. Following these interventions, the OMPT practitioner can prescribe and implement the most effective individualized exercise and movement re-education program to maintain and improve health.

The services of an OMPT practitioner are recommended for those who have muscle, joint, or soft tissue conditions that affect movement, strength, posture, or pain. This not only includes common disorders associated with mechanical etiology, such as post-

operative recovery, poor posture, overuse/ athletic injuries, obesity, arthritis, and congenital conditions; but also the disability associated with medical conditions such as Parkinson disease, multiple sclerosis, cerebral palsy, spinal cord injury, diabetes, cancer, heart disease, or balance disorders. Patients suffering from chronic conditions can benefit from skilled OMPT intervention with the goals of attaining optimal health, returning to optimal activity, and minimizing the disability associated with disease progression.

How to Become an OMPT Advanced Practitioner

In order to become an advanced practitioner of OMPT, an individual must complete an APTA-accredited fellowship program and meet the Educational Standards of the International Federation of Orthopaedic Manipulative Physical Therapists (IFOMPT), that were adopted by the AAOMPT in 2012 and are described in this document. Upon completion of such a program, the individual may be eligible to become a Fellow of the AAOMPT. Definitions of fellowship education and eligibility requirements of the APTA and the AAOMPT are included in Appendix 3. These requirements may change over time. Individual clinicians and program managers should visit the websites of the APTA (www.apta.org), the ABPTRFE (www.abptrfe.org), and the AAOMPT (www.aaompt.org) to obtain the most current information.

Fellow Renewal Process

Fellows are credentialed for a renewable period of 10 years. Renewal of fellow status requires that the individual demonstrate evidence of significant involvement across the domains of clinical care, scholarly activity that validates practice and expands the body of knowledge of OMPT, clinical and didactic education and mentoring, service to the profession and to the community, and personal professional development. Fellows should visit the AAOMPT website to obtain updated information on requirements and timelines.

The AAOMPT supports ongoing professional growth and development across the entire span of a career. This aligns with the position of the IFOMPT, which advocates “a commitment to ongoing professional development.” Professional development fosters an attitude of inquiry and promotes engagement in processes of assessment and actions that provide the opportunity for:

- Maintaining and expanding knowledge and skills based on current best evidence
- Induction into new responsibilities
- Self-reflection about and facilitation of professional core values
- Autonomous practice within the context of one’s health care setting
- Creating, anticipating, and actively managing change in an evolving health care system

Orthopaedic manual physical therapy practitioners are expected to participate in professional development:

- To ensure continued competence through the acquisition and maintenance of minimally acceptable standards of practice.
- To strive towards the achievement of excellence in practice
- To support and advance the profession

Chapter 2: Clinical Practice Dimensions

I. Examination and Evaluation

A. Perform targeted patient/client interview/history

1. Develop a patient profile:

a) Physiological and biographical data (e.g. age, sex, height, weight, handedness, primary language, psychosocial profile, learning style).

b) Review of body systems/medical screening

(1) Screen for diseases or symptomatology which may mimic the musculoskeletal complaint(s) for which the patient is seeking treatment (e.g. review of systems: integumentary, cardiopulmonary, urogenital, psychosocial).

(2) Select appropriate evidence-informed screening tools

(3) Review growth and development, including hand/foot dominance and developmental history as indicated.

(4) Assess “red flags” (warning signs that a referral to a health care practitioner other than a physical therapist is indicated) which may impact manual physical therapy examination—contraindications/precautions for manual physical therapy examination, such as steroid/anticoagulant use, signs and symptoms suggesting cauda equina, vertebral artery insufficiency, cervical artery dysfunction, vestibular balance insufficiency, etc.

c) Analyze the relevance of clinical and diagnostic findings:

(1) Laboratory and diagnostic tests including EMG/NCV

(2) Imaging tests

(2) Available records (e.g. medical, education, surgical)

(3) Other findings (e.g. nutrition and hydration)

d) Review current and prior medical and surgical history:

(1) Recent medical examinations and treatment

(2) Prior hospitalizations, surgeries, and pre-existing medical and other health-related conditions.

e) Review current medications, usage patterns, and effects (e.g. steroid, anticoagulant use).

f) Address activities and participation/functional level data (current and prior work/school/play), community and leisure actions, tasks or activities, movement stresses, other daily living activities) and percentage of time they are performed.

g) Assess living environment:

(1) Devices and equipment (e.g. assistive, adaptive, orthotic, protective, supportive, prosthetic).

(2) Living environment and community characteristics

h) Interpersonal interactions and relationships/psychological factors (e.g. family/social systems generating support or stress, mental/behavioral status, cultural influences, financial resources or health insurance factors which influence treatment options, worker's compensation or litigation status).

i) Identify examination findings that warrant monitoring: examination findings that may become red flags, but at the moment warrant monitoring, including psychosocial factors:

(1) General health status (self-report, family report, caregiver report)

(2) General health perceptions

(3) Physical function (e.g. sleep patterns, general level of fatigue)

(4) Psychological function (e.g. memory, reasoning ability, anxiety, depression, morale, fear-avoidance beliefs, catastrophizing).

(5) Role/function (e.g. worker, student, spouse, grandparent)

(6) Community, social and civic life/social function (e.g. social interaction, social activity, social support).

(7) Social habits (past and current):

(a) Behavioral health risks (e.g. smoking, substance abuse)

(b) Level of physical fitness (self-care, home management; community, work, school, and leisure activities).

j) Family history: familial health risks

k) Patient's expectations regarding OMPT and belief/confidence in his/her ability to manage the problem.

2. Identify the patient's major problem(s)/concern(s):

   a) Area(s) of primary and secondary symptoms including recognition of contributions from body functions/structures/ multiple sites (e.g. arm pain with spinal, shoulder, and visceral contributions).

   b) Quality of symptoms (e.g. pain, dysesthesia, weakness, stiffness, incoordination).

   c) Behavior of symptoms (e.g. constant; intermittent; episodic; change over 24-hour period, including non-optimal sleep; effect on sleep pattern and weekly cycles).

   d) Aggravating/easing factors (e.g. posture, rest, activity, positions, movements, medications) with associated time needed to aggravate or ease.

   e) Functional impairments, functional limitations, or disabilities:

      (1) Impairments of tissue: loss or abnormalities of physiological, psychological, or anatomical structure/function

      (2) Functional limitation: limitation in performing at the level of the whole person; limitation in performing a physical action, activity or task in an efficient, typically expected, or competent manner.

      (3) Functional disability: inability to engage in age-specific, gender-related, or gender-specific roles in the patient's particular social/physical environment.

   f) Clarify potential symptoms related to cervical or vertebral artery disease, spinal cord, cauda equina, or other systemic problems.

3. Identify chronological record of presenting symptom for each area of symptoms and/or each dysfunction:

   a) Concerns that led client to seek services of a physical therapist

   b) Concerns or needs of client who requires services of a physical therapist

   c) Current therapeutic interventions

   d) Manner and mechanisms of onset of injury or disease (traumatic or non-traumatic, insidious, time since onset etc.).

   e) Progression/remission since onset (e.g. changes in area of symptoms; changes in quality, frequency, or intensity of symptoms).

f) Previous history relevant to present complaint(s)

g) Previous or concurrent therapeutic interventions and response(s)

h) Responses to current home exercise programs and/or self-treatment

i) Patient/client, family, significant other, and other caregiver expectations and goals for the therapeutic intervention(s).

j) Client, family, significant other perceptions of patient/client's emotional response to current clinical situation.

4. Assess and continually reassess the priorities for assessment and intervention in the patient with multiple areas of dysfunction.

B. Evaluate Data from Patient/Client History

1. Correlate and analyze relevant, consistent, and useful information, and recognize common clusters of signs and symptoms that may indicate a serious medical condition or musculoskeletal dysfunction(s).

2. Assess "red flags" (i.e. possible presence of non-musculoskeletal conditions) and determine need for referral to other providers.

3. Identify primary, secondary and multiple complaints and discern relationships between complaints.

4. Review data and obtain additional information

5. Reflect on the patient's interpretation of symptoms

6. Assess the patient's goals, needs, motivations, and expectations

7. Correlate symptoms with movement patterns and function

8. Analyze data to develop and prioritize working hypothesis(es) of the musculoskeletal physical therapy diagnosis(es), including:

   a) Nature and severity of problem(s)

   b) Probable cause(s) of problems(s)

   c) Anatomical structures potentially involved

   d) Irritability, stage, stability of condition(s)

   e) Indications, cautions and/or contraindications to manual physical therapy examination and treatment/interventions.

f) Impairments of structure involving an anomaly, defect, loss or other significant deviation in body structure(s)/pathological sources of symptoms.

g) Individual and societal environmental factors/psychosocial and socioeconomic stressors (e.g. support provided by family unit and/or caregivers) which may affect management.

h) Patient goals

9. Analyze data to differentiate whether patient demonstrates:

a) Non-musculoskeletal condition requiring referral to and/or consultation with another health care provider (including other physical therapists).

b) Musculoskeletal impairments/problems responsive to physical therapy intervention; may be temporary, permanent, progressive, regressive or static, intermittent or continuous.

c) Need for referral or consultation with other health care practitioners (including other physical therapists and others for further tests, opinions, etc.), prioritizing the needs of the different dysfunctions in the patient with multiple areas of dysfunction.

C. Plan Targeted Physical Examination

1. Identify red flags for specific tests and measures procedures

2. Analyze history and systems review/body functions to guide selection of tests and measures.

3. Select evidence-informed outcome measures appropriate to the management of NMS dysfunction (e.g. Screen Assist, STarT BACK, ADD depression screen).

4. Select tests and measures based on the literature that are valid and reliable, that will be precise in the intervention setting, and that have low risk.

5. Include examination techniques with a high probability of contributing to the development and refinement of the working hypothesis(es) and/or negation of the hypothesis(es).

6. Be comprehensive with focus and detail appropriate to the working hypothesis and the patient's problem(s) and concern(s).

7. Judge the extent and vigor of the physical examination which considers the nature, severity, irritability, stage and stability of the symptom(s)/problem(s).

8. Select and prioritize:

    a) Areas to be examined

    b) Movements to be examined

    c) Functional activities to be examined/functional activities/participation

    d) Examination procedures

    e) Examination sequence to minimize strain on sensitive areas and maximize efficiency.

    f) Examination procedures that identify local vs. regional vs. widespread pain sensitivity.

D. Conduct Physical Examination

1. Prepare area, equipment, and patient to facilitate patient relaxation, soft tissue relaxation, and appropriate joint and soft tissue positioning to obtain consistent and accurate measurement(s).
2. Obtain patient/client consent for the examination
3. Optimize the examination environment by:

    a) Encouraging a welcoming and respectful atmosphere

    b) Using firm, professional and caring hand contact

    c) Being aware of abnormal tissue responses to pressure, force, and temperature

    d) Being aware of the patient's facial expression and maintaining eye contact

    e) Utilizing efficient body mechanics for operator safety as well as to allow accurate interpretation of palpatory findings.

    f) Maintaining appropriate communication throughout the examination to facilitate patient understanding of the examination process and agreement by the patient to proceed with the examination.

    g) Utilizing a culturally-competent and sensitive approach individualized for the patient.

4. Concurrently interpret the data and modify the examination as appropriate, and document relevant normal and abnormal data.

5. Select examination tests and measures and techniques to differentiate musculoskeletal from non-musculoskeletal problem(s) and to efficiently test the diagnostic hypotheses.

6. The examination includes:

    a) Static posture/alignment

    b) Active motion

    c) Passive motion; detailed assessment of:

        (1) Joints

        (2) Muscle length/flexibility/extensibility

        (3) Passive soft tissue (non-contractile) mobility

        (4) Mobility of neural elements

    d) Motor function (motor control and motor learning/body schema)

    e) Muscle performance

    f) Neurological/neurovascular status:

        (1) Nerve function

        (2) Differentiation of upper and lower motor neuron dysfunctions

        (3) Vascular status

    g) Palpation

    h) Special tests

    i) Functional activities and associated movement patterns

7. Outline of Examination Process

    a) *Static posture/alignment*

        (1) Describe general body structures, somatotype, proportional symmetry, and fitness level.

        (2) Assess alignment of the patient's center of mass over his/her base of support during varying static positions.

        (3) Assess alignment of body structure/segments (e.g. feet, legs, thighs, pelvis, thorax, scapulae, upper extremities, head) in various static positions.

(4) Identify impairments of body structure/bony anomalies or structural asymmetries and assess relative positions of bony prominences in various positions.

(5) Interpret changes in body contour that might suggest underlying musculoskeletal dysfunction (e.g. effusion, atrophy, spasm, structural deformity).

(6) Analyze changes in skin quality and appearance associated with underlying musculoskeletal dysfunction (e.g. inflammation, adhesion formation, overuse, trauma, vascular insufficiency, systemic disease).

(7) Assess the appropriateness of adaptive/assistive devices and appliances in use which may affect musculoskeletal system function (e.g. orthotics, off-the-shelf supports, braces, eyeglasses, hearing aids, specialized devices in use at the patient's job site).

(8) Incorporate assessment of interpersonal interactions/relationships/ behavioral affect and general appearance (e.g. visual cues which may reflect mental or behavioral factors, cultural background, socioeconomic status, and symptoms, including pain and weakness).

(9) Hypothesize regarding potential cause(s) of postural asymmetry (e.g. joint contracture or deformity; muscle flexibility/extensibility, muscle power, endurance and coordination deficits; neurological deficit; habitual or repetitive motor pattern) related to symptoms.

b) *Active motion*

(1) Interpret the amount of available range and the quality of active motions:

(a) Observe available active range and compare with normal range with respect to age, body type, and physical condition.

(b) Observe for and interpret compensatory movement(s), altered speed of motion, "catches" during motion, and characteristics of return to original starting position.

(c) Correlate with symptom reproduction or reduction

(d) Assess effects of altering the position of associated or adjacent joints, on available active range of motion (AROM) and symptoms (e.g. cervical side-bending (SB) on shoulder abduction).

(e) Assess the effect of weight-bearing, non-weight-bearing, loading and unloading on available AROM and symptoms.

(f) Assess the effects of repeated or sustained movements on AROM and symptoms.

(g) Assess the inability to repetitively achieve a predetermined point in the range of motion.

(h) Analyze abnormal patterns of muscle activity during active motion.

(i) Describe crepitus or sounds associated with active movements and determine relevance.

(j) Palpate bony landmarks during active physiological (osteokinematic) motion.

(2) Hypothesize regarding possible relationship(s) among abnormal active motion dysfunction(s), static alignment variations/faulty alignment, and symptoms.

c) *Passive motion*

The OMPT practitioner uses manual assessment of motion and any resulting provocation or alleviation of symptoms as the pathway to determine irritability of selected body structures/tissues, and their contribution to the complaint, movement restriction and/or dysfunction.

(1) Interpret physiological (osteokinematic, angular) motions for:

(a) Amount of motion

(b) Quality of motion at the beginning (neutral zone) and through the available range.

(c) Quality of movement at end range:

i) Normal vs. abnormal for body type

ii) Through-range and end range types of resistance:

* *normal* tissue approximation (e.g. muscle, cartilage)

* *normal* tissue stretch (e.g. capsule, muscle, ligament)

* *abnormal* tissue approximation (e.g. abnormal capsule, swelling, bony block, abnormal cartilage, loose body within joint, congenital anomaly).

* *abnormal* tissue stretch (e.g. joint adhesion, laxity, muscle spasm).

(d) Compensatory movement(s) (e.g. modifying glenohumeral forward elevation with internal rotation or external rotation to perform elevation in comfort).

(e) Correlation of symptom and sign reproduction/reduction

(f) Correlation of effects of loading, unloading, and altering the position of associated segments on available PROM, and alteration (if any) in type of movement barrier(s) throughout the range.

(g) Correlation of combined movements with symptom and sign reproduction.

(2) Analyze the effects of change in speed, amplitude and direction of passive physiological (osteokinematic) motion on sign and symptom reproduction.

(3) Perform appropriate stability tests, including spinal and costal joints, shoulder girdle joints, temporomandibular joints, pelvic girdle joints, and all peripheral/limb joints to assess the integrity of ligaments and related soft tissue structures of the joint complex.

(4) Examine accessory (arthrokinematic) motions in order to make inferences about potential tissues/structures which may be causing limitation of motion(s). These may include:

(a) Glides (i.e. following plane of joint surface)

(b) Distraction (i.e. perpendicular to joint surface)

(c) Compression (i.e. approximation to joint surface)

(d) Rotation

(e) Combinations of glide, distraction and compression and rotation.

(5) Examine accessory (arthrokinematic) motions for:

(a) Amount of motion

(b) Quality of motion at the beginning (neutral zone) and through the available range.

(c) Quality of movement at end range:

i) Normal vs. abnormal for body type

ii) Through-range and end-range types of resistance:

* *normal* tissue approximation (e.g. muscle, cartilage)

* *normal* tissue stretch (e.g. capsule, muscle, ligament)

* *abnormal* tissue approximation (e.g. abnormal capsule, swelling, bony block, abnormal cartilage, loose body within joint)

* *abnormal* tissue stretch (e.g. joint adhesion, laxity, muscle spasm)

(d) Compensatory movements

(e) Correlation of symptom and sign reproduction(s)/reduction(s)

(f) Correlation of effects of loading and unloading on symptom and sign reproduction(s)/reduction(s).

(g) Correlation of combined movements with symptom and sign reproduction(s)/reductions(s).

(6) Analyze the effects of speed, amplitude and direction of accessory (arthrokinematic) motion on symptom and sign reproduction.

(7) Assess and interpret mobility of the neural elements:

(a) Apply appropriate testing to include variations of load, speed, pre-positioning and sequencing to provide the most sensitive test of the neural structures.

(b) Compare symptoms and signs with accepted standards of range of motion, subjective responses, and intra-patient variances.

(c) Analyze symptoms and signs associated with nerve entrapment by palpatory provocation of the nerve and identify correlation (if any) with the patient's reported problems.

(8) Hypothesize regarding relationships among passive motion dysfunction(s), active motion dysfunction(s), static alignment, and symptoms.

d) *Passive muscle flexibility/extensibility*

(1) Assess available range of muscle flexibility/extensibility by use of muscle length tests and compare results with accepted standards. Include single-joint and multi-joint myofascial structures.

(2) Assess symptoms and signs associated with muscle flexibility/extensibility examination procedures and identify correlation (if any) with the patient's reported problems.

(3) Assess presence of tonal changes (e.g. hypertonicity or hypotonicity).

(4) Assess available range of muscle flexibility/extensibility at adjacent body segments.

(a) Assess muscle length abnormalities of excessive shortening or lengthening which may cause mechanical compensations at adjacent segments during functional movements.

(b) Assess muscle length abnormalities which may contribute to abnormal or inefficient movement patterns.

(5) Hypothesize regarding relationships among abnormal muscle length, static postural asymmetries, active and passive motion patterns, and related symptoms.

e) *Passive soft tissue (non-contractile) mobility*

(1) Assess soft tissue mobility (e.g. palpable hypomobilities/ restrictions), including:

(a) Fascial

(b) Integumentary

(c) Neuroanatomical

(2) Hypothesize regarding relationships among soft tissue abnormalities, active and passive motion, static posture, passive muscle flexibility, and symptoms.

f) *Motor function (motor control and motor learning)*

(1) Assess ability to learn or demonstrate the skillful and efficient assumption, maintenance, modification, and control of voluntary postures and movement patterns.

(2) Assess the ability of a muscle or group of muscles to function in a coordinated manner.

(a) Assess the ability of the muscles to perform co-contraction/ stability (weight-bearing or closed-chain) functions around a joint appropriate to the demands of a required movement task.

(b) Assess the ability of the muscles to perform open-chain movement functions (swinging/reaching) of a limb appropriate to the demands of a required movement task.

(c) Assess appropriate recruitment pattern(s)

(d) Assess patient-determined effects of cooperation and motivation.

(e) Assess motor function for segmental (local), regional, and global muscle groups.

(3) Hypothesize regarding relationships among motor function, active and passive motion, soft tissue mobility, passive muscle flexibility, static posture, and symptom reproduction.

g) *Postural control*

(1) Assess the influence of normal and abnormal segmental (local), regional, and global muscles or muscle groups on postural control of the regions close to as well as remote from the areas of symptoms/dysfunctions.

h) *Muscle performance*

(1) Assess the ability of a muscle or muscle group to perform a specific function during a movement task.

(a) Assess the ability of the muscle(s) to perform a high resistance, low repetition task (strength).

(b) Assess the ability of the muscle(s) to perform a high repetition, low resistance task (endurance).

(c) Assess the ability of the muscle(s) given any specific functional task over time (power).

(d) Assess the ability of a muscle or muscle group to maintain static and dynamic stability at a segment or joint.

(2) Assess the performance of a specific muscle using standard manual or instrumented muscle tests (i.e. resisted tests) and compare results with accepted standards and expected norms with respect to age, gender, body type, and physical condition.

(3) Hypothesize regarding relationships involving symptom reproduction with resisted muscle contraction and the patient's static posture, active and passive motion, passive muscle flexibility, soft tissue mobility, and motor function.

i) *Neurological status*

(1) Perform a neurological examination and evaluate results. Include the appropriate tests among the following: reflexes, muscle performance, sensation, cranial nerve and upper motor neuron function (Clonus, Babinski, Hoffman's, etc.) and muscle tone.

(a) Analyze the effects of load, patient positioning, and repetition on the sensitivity of the test being performed.

(b) Analyze disorders of the central nervous system (e.g. abnormal reflexes, muscle hypertonicity, coordination deficits, cognitive deficits, and central pain mechanisms).

(c) Analyze disorders of the peripheral nervous system (e.g. sensory and motor deficits corresponding to a segmental level or an individual nerve) including cranial nerves.

(d) Analyze disorders of the autonomic nervous system (e.g. vasomotor instability, excessive/absent sweating, pupil constriction, or associated pain mechanisms, such as sympathetically maintained pain syndrome (SMPS)).

(e) Analyze the role of the vestibular system in contributing to the patient's symptom patterns/movement dysfunction(s).

(2) Hypothesize regarding relationships among neurological findings, neural mobility, and significant examination findings.

(3) Recognize neurological conditions that require medical/surgical consultations and initiate timely referral, if applicable.

(4) Perform vascular and neurovascular screening examinations and evaluate circulatory conditions.

(a) Evaluate risk, and select and perform special tests and measures to screen for signs and symptoms of cervical artery dysfunction and vertebral-basilar insufficiency, including cranial nerve testing and blood pressure screening.

(b) Analyze skin condition and peripheral pulses, and perform other special tests (i.e. Homan's, Allen test, Well's criteria, Autar DVT Risk Assessment Scale, Pulse assessment, ABI, and pulse deficit) to screen for circulatory deficiencies in the extremities.

(5) Hypothesize regarding relationships of the neurological findings, neurovascular findings, and mobility of neural elements with the patient's related and significant examination findings.

(6) Recognize neurological and neurovascular conditions that require medical/surgical consultations and initiate referral, if applicable.

j) *Palpation*

Analyze the following:

(1) Temperature changes, swelling

(2) Tissue texture abnormalities

(3) Osseous structures (alignment, asymmetries, anomalies)

(4) Soft tissue structures (muscle, ligament, tendon, bursa, neural elements).

(5) Symptom response

(6) Response to varying force at varying speeds

(7) Correlation of palpatory findings with the patient's other dysfunctions and symptoms.

k) *Special tests*

(1) Perform and analyze the results of specialized regional examination procedures not previously mentioned, as required, to contribute to refinement of the working hypothesis of the patient's movement dysfunction (e.g. upper cervical stability testing, lumbar spine segmental stability testing).

(2) Correlate with other tests as appropriate

l) *Functional activities and associated movement patterns*

(1) Examine and analyze the efficiency and control of locomotion, functional postures, and movements associated with ADL, occupational, and recreational activities.

(2) Hypothesize regarding cause(s) of locomotion and functional limitations (e.g. muscle weakness due to disuse atrophy, antalgic patterns to avoid pain) and relationship(s) with other significant examination findings).

E. Evaluate Data from the Physical Examination

1. Correlate history and physical examination findings:
(Note: Data evaluation is iterative, continual, and ongoing throughout the physical examination).

   a) Identify findings from the physical examination which corroborate history.

   b) Identify non-contributory information

   c) Identify inconsistent information

2. Establish clinical judgment regarding examination findings as related to functional limitations, impairments, disabilities, and patient goals, including:

   a) Nature and severity of problem(s), associated/disassociated and prioritized.

   b) Location and type of involved structure(s)

   c) Anatomical structures involved (body structures/anatomical structures involved).

   d) Irritability, stage and stability of the condition

   e) Possible indications, cautions and/or contraindications to OMPT techniques and/or physical therapy management.

   f) Pathological sources of symptoms

   g) Psychosocial factors affecting management

   h) Probable cause(s) of problem

3. Analyze data from all parts of examination to differentiate a musculoskeletal from a non-musculoskeletal problem.

4. Continuously correct deficiencies in the examination as appropriate:

   a) Clarify/elaborate history

   b) Complete additional physical examination or tests, as necessary

   c) Identify need for consultation/referral regarding additional diagnostic tests.

II. Diagnosis and Prognosis

A. Through clinical reasoning, determine diagnosis through evaluation of examination findings

1. Establish clinical judgment regarding examination findings as related to functional limitations, impairments, disabilities, and patient goals, for each area of symptoms or function including:

    a) Nature and severity of problem(s); associate/disassociate and prioritize

    b) Probable cause(s) of problem

    c) Location and type of involved structures

    d) Body structures/ potential anatomical structures involved:

        (1) Irritability, stage and stability of the condition(s)

        (2) Possible indications, cautions and/or contraindications to manual physical therapy and/or other physical therapy management.

        (3) Potential impairments in body systems or structures contributing to symptoms/pathological sources of symptoms.

        (4) Impairments in individual, societal and environmental factors/ psychosocial and socioeconomic stressors (e.g. support provided by family unit and/or caregivers) which may affect management.

2. Organize examination findings into clusters, syndromes, or categories to establish a diagnosis or diagnoses.

3. Interpret and analyze examination data with emphasis on relationship of symptoms to movement and tissue irritability.

4. Compare diagnosis by OMPT with the referral diagnosis if present

5. Assess appropriateness for referral to or consultation with another health care professional, including physical therapist, based on the information gathered.

6. Provide timely, accurate and clear communication of the nature of the problem and prognosis for the injury/dysfunction(s) to the patient/client and caregivers, taking into consideration the functional, psychological, social, and cultural needs and values of the individuals.

7. Provide timely, accurate, clear written and verbal communications to other health care providers and/or community personnel involved in the care of the patient/client.

B. Determine the prognosis. This encompasses the complexity of the patient/client's dysfunctions/conditions, the level of optimal improvement that may be attained through intervention, and the amount of time required to reach predicted levels of improvement during the course of OMPT.

C. Establish intervention goals with predicted outcomes and time frames, taking into consideration the patient's expectations and functional goals.

1. Correction of existing problems with focus on importance rank according to patient presentation, including:
    a) Relief or decrease of symptoms
    b) Normalization of body structures/normalization of tissues
    c) Attainment of optimal movement and functional abilities
2. Management of existing problems which cannot be corrected:
    a) Self-management of symptoms (e.g. ability to function with established level of postural or repetitive movement stress; ability to perform a specified activity level while maintaining an established level of medication intake).
    b) Maintenance or improvement of function (e.g. acquiring the option to perform a greater number of movement tasks or perform the same amount of activity with fewer symptoms and established strategies for modifying function).
3. Prevention:
    a) Identify predisposing and risk factors for progression and/or recurrence of the problem.
    b) Minimize/manage predisposing and risk factors
    c) Attain improved functional performance and/or fitness level

D. Re-examination.

1. Choose examination measures (to serve as dependent variables) to measure initial response to treatment.
    a) Subjective measures (e.g. evidence-informed functional outcome tools including those that document level of pain with performance of a functional task).

b) Objective measures (e.g. range of motion) including a functional measure and when indicated, evidenced-informed outcome tests and measures.

c) Combined subjective and objective measures (e.g. improved quality of movement and reduced level of pain).

d) Analysis of response to motion and manual intervention and how between-visit symptoms are related to movement.

e) Standardized outcome assessment tools

III. Prioritization and Plan of Care

A. Identify OMPT intervention priorities

1. Correlate intervention(s) with identified patient problems, patient goals and/or outcomes, and relate to hypothesis.
2. Assess the order in which each patient problem will be treated
3. Assess extent of manual intervention(s) for each patient problem and relate to hypothesis in order to achieve patient goals and outcomes.
4. Assess extent of movement/exercise-based interventions and relate to hypothesis in order to achieve patient goals and outcomes.
5. Alter manual intervention(s) based on tissue response, signs and symptoms
6. Adapt manual intervention(s) based on patient preferences and sensitivities
7. Select manual intervention(s) based on the best evidence available for the specific situation.

B. Plan intervention approach

Include the following options:

1. Patient education and/or family education for:

    a) Symptom management (e.g. self mobilization; pain management) joint mobilization/manipulation (thrust/non-thrust to all joints and joint complexes of the axial and appendicular systems).

    b) Assistive devices or immobilization (e.g. collars, taping, splinting)

    c) Ergonomic instruction

d) Activities of daily living (ADL) facilitation

e) Prognosis for the existing condition

f) Activities to prevent recurrence of current dysfunction

g) Activities to promote health/fitness

2. Manual intervention for improvement of home, work and recreational function

3. Normalizing range of motion, considering patient's age, sex, body type, habitual postures, and pertinent histories.

a) Joint accessory (arthrokinematic) motion

b) Passive muscle flexibility

c) Connective tissue/soft tissue mobility

d) Mobility of neural elements

4. Pain inhibition/reduction

5. Edema control

6. Individualized therapeutic exercise prescription

7. Functional retraining/re-education

8. Intervention or instruction in the proper use of physical agents regarding joint position, posture, and desired tissue status.

C. Plan specific manual intervention strategies and identify indications/ contraindications for the following considering the strength of available, relevant evidence:

1. Type of manual intervention and exercise

2. Frequency of intervention

3. Intensity of intervention (graded mobilizations, exercise dosage for varied resistance, range, etc.).

4. Duration of intervention

5. Type and dosage of home/independent exercise programs

IV. Implementation of Plan of Care

A. Educate patient, including education of family and/or supportive personnel as appropriate

1. Discuss examination findings, diagnosis, and prognosis for various types of interventions outlined in plan of care.
2. Outline expected outcomes for designed treatment approach and strategy
3. Discuss/negotiate acceptable treatment goals, treatment plan, and responsibilities with the patient.
4. Address patient concerns/questions regarding his/her condition in a manner that provides reassurance and helps to allay patient fears surrounding treatment.
5. Outline responsibility of patient in order to achieve established treatment goals.
6. Actively engage cooperation of patient, identifying:
    a) Appropriate methods, style, and level of communication with the patient and with individuals involved with the patient's treatment program (i.e. patient's physician, family, supportive health personnel).
    b) Effect of communication on recipient; enact alternative means of communication as needed.
7. Educate patient in home care treatment program, providing education/training in strategies:
    a) For relief of symptoms, normalization of tissue status, and attainment of optimal function.
    b) For maintenance of enhanced function following intervention
    c) To prevent recurrence of patient's problem
8. Provide education in pain science
9. Obtain appropriate consent as applicable

B. Perform procedural interventions

1. Administer intervention procedures/techniques:
    a) Manual therapy including:

(1) Joint mobilization/manipulation (thrust/non-thrust to all joints and joint complexes of the axial and appendicular system).

(2) Soft tissue mobilization/manipulation (fascial, myofascial, integumentary, lymphatic drainage).

(3) Mobilization of neural elements

b) Therapeutic exercise, incorporating elements of postural control, motor control, motor learning, and coordination including:

(1) Stabilization (segmental, regional, global)

(a) manual

(b) non-manual

(2) Muscle performance, including qualities of flexibility, extensibility, strength, power, and endurance.

(3) Vestibular rehabilitation

(4) Functional movement training, utilizing concepts of neuromuscular re-education/proprioceptive training.

(5) Relaxation exercise/techniques using manual contacts to increase effectiveness of patient/client response.

(6) Pain inhibition

(7) Effusion management

(8) Specific—directed at target tissues

c) Adaptive/assistive devices and equipment using manual palpation to ensure proper placement, fit, function.

d) Ergonomic instruction/consultation

e) Immobilization procedures (taping, splinting, binders, collars)

f) Physical agents:

(1) To enhance or facilitate the effectiveness of a manual therapy intervention.

(2) To address pain/symptoms which may be impairing activity level/function.

V. Re-examination

A. Assess intervention response

1. Detect changes in patient's status in response to intervention, identifying:
    a) Change in symptoms
    b) Development of new symptoms
    c) Changes in patient status:
        (1) During administration of procedures/techniques
        (2) At the conclusion of initial intervention
        (3) Before and after each subsequent intervention session
        (4) At the conclusion of the overall course of intervention
    d) Change or lack of change in tissue response in regard to:
        (1) Nature/impairment/pathology/hypothesis/etiology
        (2) Severity
        (3) Stage of condition
        (4) Irritability
    e) Changes in activities/functional level

B. Analyze significance of changes

1. Assess the relationship between the anticipated result of implemented intervention-and the actual result using:
    a) Pre-intervention measures chosen to assess intervention responses
    b) Other subjective or objective data arising out of the course of treatment
    c) Evidence-informed outcomes tests and measures
2. Assess cause of change (e.g. effect of most recent procedure/technique/ intervention, result of home program, passage of time, result of activity, progression of disorder, or changes in patient status independent of intervention).

C. Assess change

1. Describe anticipated nature and rate of change

2. Compare and interpret discrepancies between anticipated and observed responses.

3. Identify factors or conditions which limit progress (e.g. age, physical condition, psychosocial factors, related/associated medical and musculoskeletal conditions, cultural or gender issues).

4. Identify adverse changes in individual's status:

   a) Identify red flag(s)

   b) Differentiate urgent from non-urgent symptoms

D. Re-examine/implement modified plan of care

1. If the anticipated results are not achieved, decide whether:

   a) The appropriate hypothesis and potential structure(s)/ tissues at fault have been identified.

   b) The appropriate exam procedure was chosen and performed correctly

   c) The specific intervention strategy is appropriate and has been implemented correctly.

   d) The intervention approach is appropriate for addressing the patient's problem.

   e) Manual intervention is appropriate for addressing the patient's problem

   f) Referral to another health care provider is appropriate

   g) The patient has been given sufficient education to report confidence in his/her ability to follow through with self-care instructions.

   h) Implement modified plan of care to address initial or revised hypothesis

E. Confirm/modify goals

1. Assess the extent of goal achievement:

   a) If goals are achieved, plan disposition/discharge

   b) If goals are not achieved, reassess treatment strategy/approach and/or working hypothesis.

   c) If patient reaches maximum therapeutic benefit, discharge

2. Assess whether intervention goals are realistic

3. Re-evaluate and modify hypothesis to set a new program

4. Modify treatment goals and plan of care based upon re-examination data, including patient's ability to participate in recommended plan of care.

F. Make referrals to other providers as needed

1. Make referral to appropriate health care provider for non-musculoskeletal conditions:

   a) Changes in patient status:

      (1) During administration of procedures/techniques
      (2) At the conclusion of initial treatment
      (3) Before and after each subsequent treatment session

2. Make referral to other providers for additional testing:

   a) Diagnostic imaging

   b) Psychological screening

   c) Nutrition screening

3. Communicate as appropriate with other health care providers regarding patient prognosis, treatment plan, and response to treatment.

VI. Outcomes

A. Assess the impact of the OMPT interventions at the end of episode of care on the following:

1. Pathology/pathophysiology

2. Impairments

3. Functional limitations

4. Disability

5. Risk reduction/prevention

6, Health, wellness and fitness

7. Societal resources

8. Patient/client satisfaction

B. Discharge (end OMPT services) when the anticipated goals and expected outcomes have been achieved.

C. Discontinue services when:

1. The patient/client declines to continue care
2. The patient/client is unable to continue due to medical or psychosocial complications.
3. The OMPT practitioner determines that the patient/client will no longer benefit from services.

D. Document and discuss the rationale for discontinuation of services with the patient/client, family members, and other relevant health care providers.

E. Provide for appropriate patient referral or follow-up.

VII. Documentation

A. "Physical therapy examination, evaluation, diagnosis, prognosis and plan of care (including interventions) shall be documented, dated, and authenticated by the physical therapist who performs the service. Interventions provided by the physical therapist or selected interventions provided by the physical therapist assistant under the direction and supervision of the physical therapist are documented, dated and authenticated by the physical therapist, or when permissible by law, the physical therapist assistant" (APTA Guidelines: Physical Therapist Documentation of Patient/Client Management, June 2005; BOD G03-05-16-41).

B. Select correct description and billing codes in relation to orthopaedic manual physical therapy services (APTA Professional Fees for Physical Therapy Services HOD P06-00-22-34).

C. Comply with state practice acts regarding scope of practice and accepted terminology related to OMPT for all elements of patient/client management (Manipulation Education Manual 2004, p 9).[6]

D. Accurately document all elements of patient/client management:

1. Referral for physical therapy
2. History and physical examination findings and data from outcomes instruments.
3. Physical therapy diagnosis/hypothes(es)
4. Indications for and contraindications to OMPT examination and management

5. Informed consent as applicable
6. Prognosis
7. Goals and plan of care; modifications to goals and plan of care
8. Progress reports and summaries as required by physicians, other caregivers and payers.
9. Summaries of relevant data following conclusion of current episode of care, including reason for discharge, current status, degree of goal achievement, and discharge plan.
10. Additional information (including diagnostic labels) from other health care professionals, and referral, when appropriate, to appropriate practitioners or resources (HOD P06-97-06-19).
11. Peer review findings, record reviews, case conferences, patient care rounds, and patient/client family meetings.[5]

Although the exact wording may differ, the clinical practice dimensions listed above include all of the following dimensions from the IFOMPT Educational Standards and are part of the clinical practice dimensions required of an advanced OMPT practitioner:

1. Critically evaluate, through sensitivity to behaviour, the influence of the OMT Physical Therapist's behaviour on a patient's behaviour and vice versa.
2. Critically use data from outcome measures to evaluate the clinical behavioural aspects of a patient's presentation.
3. Demonstrate appropriate selection of assessment techniques and tools through understanding of their diagnostic and evaluative qualities (including: reliability, validity, responsiveness and diagnostic accuracy).
4. Critically select and use appropriate practical skills and outcome measures to enable collection of high quality clinical data to inform effective clinical reasoning during patient assessment.
5. Critically select and use as appropriate, a range of therapeutic OMT interventions including patient education, mobilisation, manipulation and exercise prescription with appropriate consideration of treatment timing, dosage parameters and progression of interventions.
6. Apply all practical skills with precision, adapting them when required, to enable safe and effective practice.
7. Critically apply a range of other interventions, as appropriate, to enhance patient rehabilitation (e.g. taping).
8. Integrate and apply knowledge of examination procedures and differential diagnosis in the assessment of NMS dysfunction.
9. Critically apply knowledge and advanced clinical reasoning skills to differentiate dysfunction of the NMS system from non-mechanical dysfunction in other systems.
10. Critically apply knowledge of indications, contraindications, precautions and effects to inform best practice in the management of NMS dysfunction.

11. Critically apply knowledge of the clinical sciences (clinical anatomy, physiology, biomechanics and epidemiology) to enable effective assessment of the nature and extent of patients' functional abilities, pain and multidimensional needs in relation to the ICF classification.
12. Critically apply knowledge of effectiveness and risks to inform OMT interventions and accurately predict prognosis with realistic outcomes.
13. Integrate and apply knowledge of prognostic, risk and predictive factors of relevant health problems to OMT management decisions to ensure the patient can make informed choices.
14. Demonstrate empathetic, efficient and effective use of active listening skills, questioning strategies, interpersonal skills and other verbal/non-verbal communication skills to obtain reliable and valid data from the patient, avoiding errors of communication to enable effective OMT patient management.
15. Demonstrate efficient and clear written communication, patient record keeping, and evidence of informed consent for effective and safe OMT patient management that meets medico-legal requirements.
16. Effectively explain the assessment findings and clinical diagnosis to the patient to enable a collaborative, patient-centred discussion of their management options.
17. Proficiently using an advanced skill, implement effective management plans by educating patients in appropriate therapeutic rehabilitation exercise programmes, and the promotion of wellness and prevention through the education of patients, carers/care-givers, the public, and healthcare professionals.
18. Work effectively within a biopsychosocial model of OMT practice to inform assessment and management strategies.
19. Retrieve, integrate and critically apply current knowledge of the theoretical basis and evidence base of OMT to inform assessment of the NMS system.
20. Critically evaluate evidence-based diagnostic tests and outcome measures to enable a clinical diagnosis and effective evaluation of OMT management.
21. Critically apply current evidence-informed theory and knowledge of safe and effective practice of OMT in the assessment and patient-centred management of the NMS system.
22. Integrate, apply and evaluate principles of mobilisation, manipulation, motor-learning, exercise physiology, ergonomic strategies, and other modalities as components of multimodal evidence-informed OMT Physical Therapy intervention, to optimise a patient's functional ability.

Chapter 3: Patient Case Vignette to Demonstrate Clinical Reasoning Characteristics of an Advanced Practitioner

Case Introduction

Purpose

This vignette illustrates one management approach that may be used for a particular patient/client by an OMPT practitioner. It provides an example of how the practitioner-client interaction may develop while utilizing the competencies in OMPT specialty practice.

Introduction to the Patient/Client

A 43-year-old woman (referenced hereafter as CJ) comes to the physical therapy clinic with a chief complaint of left elbow pain. Her elbow had been giving her trouble intermittently for the previous two years, but it has been significantly worse over the past two to three months since she began attending a gym three months ago. She works as an administrative assistant in a job that requires significant telephone and computer work. She reports feeling stressed from having to meet frequent short-suspense deadlines set by her supervisor. In addition to the demands of her job, she raises two young children (ages 16 months and three years), and she gained about 15 pounds over the past year. In an attempt to lose weight and gain physical fitness, CJ had been performing about 20 to 30 minutes of aerobic exercise three times a week, and an upper extremity weight training program twice a week. Recently, she has been unable to continue with the upper extremity weight training because of increased left (dominant side) elbow pain.

She indicates that over the previous two years she has sought care several times for elbow-related pain. Although she experienced periods of temporary relief (via injections, medication and supportive braces), the problem never completely resolved. Because the condition grew progressively worse, her physician referred her to an orthopaedic surgeon, who suggested a “debridement.” Although CJ questions whether physical therapy will be of much help, she is willing to try it as a last resort with the hope of avoiding surgery. Her ultimate goals are to be able to work, care for her children, and exercise regularly without limitations due to elbow pain.

Plan of Care

Following the history and physical examination, the OMPT plan of care for this patient includes the following:

1. Referral to her primary care provider for a suspected gastrointestinal (GI) disorder.
2. Manipulative treatment of the elbow, wrist, and cervical spine
3. Soft tissue and neurodynamic mobility assessment and treatment

4. Exercise prescription targeting local tissues, muscle performance, motor function, neuromuscular control, and overall fitness.
5. Patient education for proper ergonomics and posture at work and during leisure, as well as self-management and prevention of future recurrence.

Questions:

1. How does the OMPT decide where to begin with treatment?
2. What led the OMPT to treat the cervical and wrist regions?
3. How will the treatment be modified throughout the course of care?
4. What is the patient's prognosis?
5. What outcomes will help the OMPT evaluate the results of intervention?

I. Examination and Evaluation

This section is a greatly abbreviated summary of the information gathering and processing. It demonstrates the complexity of an advanced OMPT practitioner's history/interview and physical examination.

A. Summary of Data from Patient/Client History

Throughout the history/interview, the OMPT practitioner is alert for any cluster of findings that might suggest the presence of a possible medical condition that warrants communication with a physician. The practitioner will note the presence or absence of "red flags" that influence patient management. For example, during the review of systems, CJ describes frequent heartburn, especially during the night, leading to daily use of antacids. She has also used nonsteroidal anti-inflammatory drugs (NSAIDs) daily for two years, and has increased her use of these over the past two months. She has not discussed her GI symptoms with a medical provider; therefore a physician consult is indicated. In addition, the following were noted:

1. She denied headaches, dizziness, and extremity numbness or tingling
2. Non-smoker who described herself to be in good health, had a recent mammogram, has been menstruating, and has no risk factors for osteoporosis.
3. No history of diabetes or thyroid disorder
4. No history of major trauma
5. Currently takes no prescription medication; admitted to using over-the-counter NSAIDS, antacids, and a multi-vitamin.
6. Her satisfaction with her job/employment did not appear to be an adverse issue.
7. Family dynamics and support seemed acceptable

The following information may be relevant to this case:

1. Primary complaints:
    a) Left dorsal and proximal (more lateral than medial) forearm pain of her dominant arm that interferes with work, exercise, and leisure activities.

b) In very poor self-perceived physical condition and wishes to "get in shape" without increased pain.

2. Secondary and tertiary complaints (solicited, not offered):
   a) Neck stiffness
   b) Lower thoracic ache
   c) Heartburn
3. Potential relationships among symptoms that must be further explored (associated/disassociated):
   a) Neck and thoracic stiffness/ache and spinal posture
   b) Neck stiffness and upper extremity dysfunction
   c) Thoracic ache and GI issue
   d) Forearm pain and:
      (1) elbow and/or wrist joint or soft tissue dysfunction maintained by repetitive use and/or a degenerative condition.
      (2) cervical spine dysfunction (neck pain with radiating pain)
      (3) peripheral nerve pathology
      (4) central sensitization

Evaluation summary of the history findings related to planning the physical examination and the ultimate decision to refer and/or treat:

1. Lateral elbow and forearm pain/tendinopathy has had variable response to previous interventions in this patient (CJ received no OMPT intervention at all, much less OMPT applied to the neck and elbow simultaneously).
2. Non-musculoskeletal involvement: possible GI disorder requiring medical referral.
3. Referral to a hand therapist not indicated
4. Psychological stress does not appear to be major factor, so no need for referral to a behavioral health provider.
5. Pacing of repetitive job and home activities may be needed for self-management.
6. Prioritized approach to tests and measures and trial intervention; however, CJ's main complaint is forearm pain, so this area requires early and complete examination.

B. Summary of Data from Physical Examination

The patient consented to the examination and did not demonstrate disproportionate or abnormal reaction to palpation or other examination procedures, reinforcing the impression that there were no significant concerns for psychosocial factors associated with her presentation (i.e. CJ's job satisfaction was good and she has been exploring additional help for the care of her children).

1. The primary findings of the physical examination include the following:

a) Lateral elbow and forearm pain: The examination of the elbow and forearm regions showed clear signs of dysfunction in the area that could be contributing to the chief symptoms:
    i) tenderness to palpation at the lateral epicondyle
    ii) pain with resisted wrist extension

b) Neck stiffness: Segmental hypomobility at spinal levels C5-C6 and C6-C7, which could be contributing to the elbow symptoms. Poor posture and muscle control, possibly requiring increased tonic muscle activity that generates a sense of stiffness.

c) Thoracic ache: Abdominal tenderness and lack of symptom provocation with thoracic examination suggest a non-musculoskeletal condition. Current and previous long-term use of NSAIDs may contribute to GI dysfunction.

2. Throughout the examination and assessment, the advanced OMPT:

a) Continually engages in dialogue and communication of findings to the patient.
b) Modifies the examination in response to emerging data without straying from the clinical hypotheses or omitting key examination components.
c) Expects a certain response to each intervention; will immediately review the relevant history or perform additional tests in response to unusual responses or the discovery of a new finding when a dysfunction has been corrected (i.e. a joint may appear stiff, but may have a covert hypermobility or even actual instability in a plane of motion that was hidden by habitual posture or soft tissue guarding).

II. Diagnosis and Prognosis

A. Diagnosis

The evaluation of patient data resulted in the following:

1. Diagnosis: lateral elbow pain consistent with degenerative tendinosis

2. Contributing factors:

a) Cervical spine joint dysfunction
b) Cervico-thoracic spine joint dysfunction
c) Elbow/wrist joint dysfunction
d) Impaired neurodynamic mobility
e) Impaired posture
f) Possible GI system involvement associated with NSAID use

B. Prognosis

The evaluation of patient data resulted in the following:

1. Prognosis is somewhat guarded secondary to the chronic and recurrent nature of the elbow complaints, the presence of associated regional complaints, the patient's low expectations for physical therapy management, and the repetitive nature of job and home-related mechanical stresses on her symptomatic areas.

2. Goals:

a) Short-term (4-6 weeks):

- The patient will report consistent functional improvements via the Visual Analogue Scale (VAS) for pain, the Disability of Arm, Shoulder and Hand (DASH) instrument, or the Patient-Related Tennis Elbow Evaluation (PRTEE) instrument.
- The patient will control/alleviate symptoms with targeted postural adjustments and exercise.

b) Long-term (12 weeks):

- The patient will report full function per the DASH or PRTEE
- The patient will routinely participate in an independent fitness program, with intermittent symptoms that are self-controlled.

III. Implementation of Plan of Care

Based on the diagnosis and prognosis, the OMPT selects appropriate physical therapy interventions informed by current best evidence, clinical judgment, and patient preferences. Examination and evaluation occur on a continual basis throughout each physical therapy encounter. Intervention is divided into three phases as described below:

Phase I (Week 1-2):

1. The OMPT refers CJ to her medical provider for further assessment of those symptoms that do not correlate with a mechanical condition (non-mechanical thoracic pain, tenderness in the abdominal region, and heartburn).
2. The OMPT provides individualized patient education to CJ throughout all three phases of the intervention. At the completion of Phase I, the goals are that CJ will be able to:
   a) Demonstrate awareness of the multiple components of her diagnosis, specifically the possible relationship between the elbow condition and the cervical spine dysfunction.
   b) Identify the negative consequences of improper exercise
   c) Adopt safe body mechanics for home, job, and gym activities
   d) Recognize the effect of poor posture on her specific symptoms while developing strategies to remodel/change her posture.
   e) Utilize ice and/or heat as self-management tools to control symptoms

3. The OMPT applies a variety of manipulative techniques to CJ. The clinical reasoning for one possible sequence of techniques is outlined below:
    a) The first manipulative technique is a unilateral left cervical thrust glide (lateral glide) at the C5-C6 level to determine whether a relationship exists between the cervical spine and the elbow condition.

    NOTE: Prior to any cervical manipulative technique, the OMPT rules out conditions that would contraindicate manipulation and considers the risks versus possible benefits of manipulation in accordance with the IFOMPT framework for pre-manipulative screening for the cervical spine. The patient had no risk factors or contraindications and was considered low risk with moderate predicted benefit. If the cervical manipulative technique reduces symptoms or improves functional movement, the technique will likely be repeated during the course of phase one. Because treatment at any given stage of the intervention plan is informed by the patient's ongoing immediate as well as longer-term response, the progression of particular OMPT interventions is individualized versus protocol-driven.

    b) The second manipulative technique is directed at the elbow to improve lateral glide of the ulna and/or to diminish pain in the region.
    c) The third manipulative technique is directed at the wrist to improve volar glide of the scaphoid and/or decrease pain in the elbow region.
    d) The final manipulative technique will be traction to the cervico-thoracic junction to facilitate more optimal posture and to reduce abnormal biomechanical loading of the mid-cervical region.

4. The OMPT performs soft tissue techniques to decrease excessive cervical and forearm tonic muscle activity. The specific muscles identified during the examination that require this intervention:
    a) Cervical: bilateral longus colli, left anterior and middle scalene, left semispinalis capitus, bilateral inferior and superior oblique, bilateral splenius cervicis, left longus capitus, left upper trapezius, and left levator scapulae.
    b) Elbow: left extensor carpi radialis brevis, left extensor carpi radialis longus, left brachioradialis, left extensor digitorum, and left extensor indicis.

5. The OMPT prescribes therapeutic exercises to influence contributors to optimal movement (i.e. vascularization, endurance, coordination, strength, power, speed) and instructs CJ in the optimal performance of these exercises. The exercise dosage is developed with consideration of CJ's baseline characteristics in order to specifically address treatment goals, including:
    a) Cervical stabilization exercises to enhance dynamic stability of the cervical spine during habitual activities, particularly those involving the upper extremities.
    b) Isometric exercises for the left extensor carpi radialis brevis muscle to modulate pain.
    c) Eccentric exercises for the left extensor carpi radialis brevis to facilitate more normal histological and mechanical properties of the tendon tissue.

d) Exercises focused on activating and strengthening trunk and upper quarter musculature to improve CJ's posture.
e) Instruction in safe participation in physical activities such as cardiovascular and relaxation exercises.

Phase II (Week 3-6):

1. The OMPT continues with selective re-examination and re-evaluation to determine whether and/or how CJ's condition is changing. Components of the clinical re-examination may include assessment of passive accessory movements, pain per the VAS, functional measures, neurodynamic mobility tests, and hand grip strength. Interventions are modified based on the findings of the re-examination/re-evaluation.
2. The OMPT reinforces patient education to maximize the likelihood that CJ is performing activities safely. The patient shares decision-making by having her questions answered and participating in problem-solving for safe function across the various components of her daily activities.
3. The OMPT provides manipulative and/or soft tissue techniques as appropriate based on re-examination findings.
4. The OMPT modifies therapeutic exercise to match the patient's response and functional levels, keeping in mind the specific treatment goals:
   a) Progresses cervical stabilization exercises to optimize cervical spine stability during functional activities.
   b) Progresses exercises aimed at restoring normal posture during static and dynamic movements.
   c) Continues eccentric exercise, targeting the tissues around the elbow to restore normal functional tolerances.
   d) Monitors and advises on physical activity to improve cardiovascular status, reduce stress, and optimize body composition.
5. Following assessment of neural tissue dynamics, therapeutic movements and exercises directed at neural structures are incorporated into the exercise program.

Phase III (Week 7-12):

1. The patient receives education focused on discharge planning including:
   a) How to recognize signs of a relapse and how to manage an exacerbation of symptoms.
   b) When to seek professional assistance for such exacerbations, and whom to see (i.e. return to physical therapy as first entry point for assessment, versus a medical provider in case of signs of increased GI symptoms).
   c) The OMPT introduces the concept of functional medicine as a possible way to ameliorate aspects of persistent medical issues that have not responded to conventional medical interventions.

d) How to progress exercise safely and effectively at home or at the gym to achieve the goals established in her plan of care. The OMPT arranges to meet CJ either at the gym where she has membership, or at a facility with comparable equipment. The OMPT and CJ will go through a routine that is abbreviated in duration but that includes all of the movements and representative starting loads CJ will need to execute in order to accomplish her fitness goals. The OMPT modifies specific aspects of the program to enable CJ to realistically and safely exercise without exacerbating musculoskeletal issues.

e) Establishment of a follow-up appointment; scheduled 3 months after discharge, to assess her status.

IV. Outcomes

The patient's chief concern motivating her decision to seek medical care was disabling lateral elbow pain causing altered family, social and job participation. Outcome measures are at the level of body function (pain and grip strength), self-reported disability (DASH; PRTEE; patient-specific activity) and participation (identified by the patient). The outcome measures and goals are assessed at selected time points; not all outcome measures are documented at every encounter.

BODY FUNCTION	**ACTIVITY**	**PARTICIPATION**
Pain at lateral elbow assessed by VAS (0-100 mm): •Present/current •At best; upon waking •At worst; after 2 hours of typing. Self-positioned upper limb tension test (ULTT).	DASH (0-100) PRTEE (0-100)	Able to take care of younger daughter. Able to work 8 hours/day. Able to engage in a fitness program at the gym.
Grip Strength (lbs.)	Opening jars; turning a screwdriver.	

Outcome goals:

Pain (best) at end of phase II: VAS =0.

Pain (worst) at end of phase III: VAS decreased 50% from baseline; 60-80/100 to 30-40/100.

Pain (in self-positioned ULTT) at end of phase III: VAS decreased 50% from baseline; 80/100 to 40/100.

Grip strength at end of phase III: within 90% of the uninvolved side.

Self-reported disability at end of phase III: DASH and PRTEE instrument scores improved 25% versus baseline scores.

Chapter 4: Professional Practice Dimensions Expected of the Orthopaedic Manual Physical Therapy Advanced Practitioner

Purpose

The practice dimensions outlined in this section will assist professionals in their career planning. These practice dimensions reflect current IFOMPT educational standards.

I. Evidence-Informed Practice

1. Critically reviews quantitative and qualitative research literature, recognizing quality in research design, data analysis, and levels of research evidence.
2. Retrieves, integrates, and critically applies knowledge from the clinical, biomedical and behavioral sciences in order to draw inferences for OMPT practice, while recognizing the limitations of incorporating evidence into practice.
3. Assesses the validity of tests performed, including their sensitivity and specificity.
4. Critically evaluates the results of treatment accurately and modifies and progresses treatment and management as required using outcome measures to evaluate the effectiveness of OMPT.
5. Integrates and applies evidence-informed approaches in the presentation of health promotion and preventive care programs.
6. Enhances and promotes the rights of the patient to actively participate in the health care management process, considering the patient's wishes, goals, attitudes, beliefs, and circumstances.
7. Recognizes the need for the development of further evidence in OMPT practice and the role of research in advancing the body of knowledge in OMPT.
8. Recognizes and assesses the risk-benefit ratio of specific interventions, including the principle that interventions for which there is little or no evidence for additional benefit, but which carry some increased risk of harm, should be deferred.
9. Collects patient-reported outcomes for every patient to allow for outcome tracking to add to the evidence for clinical practice.

II. Clinical Reasoning

In patient care, the OMPT practitioner engages in ongoing high level, effective clinical reasoning, including emphasis on:

a) Ethics

b) Resource efficiency

c) Multiple levels of hypothesis generation during (early) subjective examination, and development of hypotheses about contributing factors, precautions, contraindications, and management.

d) Generation of a continually developing understanding of the patient's treatable problems by serially identifying the underlying mechanisms contributing to those problems.

e) Advanced skills in pattern recognition which drive:
    1) Expert prioritization of differential diagnosis and systematic assessment to rule in/rule out hypotheses.
    2) Use of efficient processes to control reasoning in dealing with complex patients with multiple comorbidities.
    3) Expert exam planning based on appropriate interpretation of the subjective examination, including system screening as well as assessment of pain, sensitivity, and irritability.
    4) Flexibility and openness in the analytic process—reflection in action/metacognition to respond appropriately to emerging data.
    5) Collaborative reasoning involving the patient in the patient-centered care process.
    6) An evolving understanding of the patient presentation that identifies underlying mechanisms contributing to patient problem(s).

III. Reflective Practitioner

As a reflective practitioner, the advanced OMPT practitioner:

a) Utilizes ongoing effective self-assessment of clinical and professional skills to reflect on practice and identify opportunities for improvement.

b) Uses effective communication skills to control and express his/her emotions, and to handle interpersonal relationships judiciously and empathetically.

c) Assesses practice outcomes to validate PT services provided, such as quality, effectiveness, productivity, and service; and identifies opportunities for improvement.

d) Identifies and prioritizes areas for growth and follows through as a lifelong learner through review of research as well as professional affiliations.

e) Identifies and encourages interprofessional practice opportunities.

f) Shares expertise and experience as an educator and mentor in the development of future advanced OMPT practitioners.

g) Adheres to the AAOMPT Code of Ethics.

IV. Professional Association Membership

Maintains current membership, or eligibility for membership, in the AAOMPT, APTA, and APTA sections.

V. Patient Care

A. Conducts direct or indirect patient care.

B. Contributes to hospital or clinic database(s) about delivery of PT services in OMPT settings (e.g. collecting patient-reported and other outcome measures to allow for outcome tracking and research to expand the evidence for clinical practice); assists in gathering relevant data related to outcomes of PT services such as productivity, quality, and service measures.

C. Maintains/advances level of knowledge of current legislative/regulatory/ medical-legal issues pertaining to OMPT practice and education.

D. Adheres to the AAOMPT Code of Ethics.

VI. Professional Development

A. Advances knowledge of current best evidence in diagnostic, prognostic, and intervention techniques, methods and theories relevant to the practice of OMPT through:

a) Attendance at professional education inservices, seminars, and conferences.
b) Attendance at university academic courses
c) Structured independent study
d) Reading current literature, including 'classic" literature which has contributed to the evolution of OMPT.

VII. Teaching

A. Contributes to the professional development of OMPTs or PT students through teaching in a university or clinical setting, serving as a clinical instructor, or serving as a mentor.

B. Educates, guides, and mentors other health care professionals/administrators with respect to the scope and role of OMPT theory and practice.

VIII. Scholarly Activity

A. Contributes to the OMPT body of knowledge by publishing case reports, single case study-design studies, clinical trials, or other clinically relevant research in peer-reviewed publications.

B. Contributes to the OMPT body of knowledge by participation in scientific venues (e.g. platform or poster presentations).

C. Contributes to the OMPT body of knowledge by sharing observations/ expertise through writing textbooks and book chapters, publishing in non-peer-reviewed publications, creating videos, or other related activities.

IX. Professional Service

A. Contributes to the development of the profession and community by completing one or more of the following community services: teaching, health promotion events, or provision of pro bono care.

B. Contributes to the advancement of the profession through one or more of the following professional services: participation in the legislative process on issues related to OMPT, or assuming a leadership role(s) within the AAOMPT, APTA, and APTA components, including academies (Orthopaedic, Sports, etc.), and state chapters/districts.

X. Other Professional Roles

A. Consultant: Consults with peers, colleagues, other health care professionals, or members of other community agencies and legislative, legal, and/or regulatory organizations.
B. Communicator
C. Collaborator
D. Leader/manager
E. Health advocate
F. Scholar

Although the exact wording may differ, the professional practice dimensions listed above include all of the following outcomes from the IFOMPT Educational Standards and are part of the professional practice required of an advanced OMPT practitioner:

Critically apply the hypothetico-deductive and pattern recognition clinical reasoning processes using the various categories of hypotheses used in OMT, related to diagnosis, treatment and prognosis.

Critically evaluate and effectively prioritise clinical data collection to ensure reliability and validity of data and quality of clinical reasoning processes.

Integrate evidence-informed practice, reflective practice and metacognition into a collaborative reasoning/clinical decision-making process with the patient, carers and other health professionals to determine management goals, interventions and measurable outcomes.

Utilise effective integration of in-depth knowledge, current best practice, patient-centred practice, cognitive and meta-cognitive proficiency within OMT clinical practice.

Solve problems with accuracy, precision and lateral thinking within all aspects of clinical practice.

Utilise sound clinical judgement, evaluating benefit and risk, when selecting OMT assessment and treatment techniques appropriate to the patient's changing environment and presentation.

Critically apply efficient, effective and safe OMT intervention in patients with complex presentations (e.g. multiple interrelated or separate dysfunctions and/or co-morbidities).

Produce scholarly contributions to the body of OMT knowledge, skills and measurement of outcomes.

Recognise the need for the development of further evidence in OMT practice and the role of research in advancing the body of knowledge in OMT Physical Therapy.

Critically evaluate common quantitative and qualitative research designs and methods.

Generate an appropriate research question based on a critical evaluation of current research evidence relevant to OMT practice and NMS dysfunction.

Systematically address all ethical considerations associated with research involving human subjects.

Effectively execute a research project or systematic enquiry relevant to OMT practice and NMS dysfunction, selecting appropriate data analysis procedures and disseminating the conclusions of the study.

Chapter 5: Foundational Knowledge Underlying Orthopaedic Manual Physical Therapy Practice

Chapters 5 covers the foundational knowledge and skill requirements to meet the minimal standards of OMPT Practice as described in the IFOMPT Educational Standards (Adopted 2012).

I. Human Anatomy and Physiology

A. Body Functions and Body Structures

1. Musculoskeletal system
2. Neuromuscular system
3. Cardiovascular, lymphatic and pulmonary systems
4. Integumentary system
5. Other systems: endocrine, reproductive, urogenital and gastrointestinal
6. Histology (e.g. connective tissue, muscle, nerve, bone)
7. Physiology of exercise and physiological demands

B. Movement Science

1. Biomechanics and kinesiology
2. Exercise physiology
3. Motor learning and control

II. Pathophysiology

A. Symptoms/signs of injury/disease

B. Disease epidemiology

C. Trauma, immobilization, inflammation, tissue healing and repair, and aging

D. Pathomechanics/pathokinesiology

E. Pain Science related to the NMS system including peripheral and central nervous system pain physiology, with emphasis on both pain mechanisms and clinical pain presentation.

III. Orthopaedic Medical/Surgical Interventions

Selected Aspects of Medical Management in the Following Areas:

A. Orthopaedics

B. Rheumatology

C. Medicine (including science-based functional medicine; e.g. nutrition, exercise, and sleep).

D. Neurology

E. Dentistry

F. Surgical procedures

G. Pharmacology (e.g. indications, contraindications, effects and side-effects of therapeutic drugs related to the examination and management of mechanical and non-mechanical NMS dysfunction).

H. Radiology/ imaging studies

I. Ancillary tests (e.g. EMG, EKG, and lab studies)

IV. Behavioral Sciences

A. Theories of communication including effective communication skills; and effective use of communication technologies with patients, families, and providers.

B. Theories of teaching and learning

C. Chronic pain management and prevention

D. Effect and value of behavioral health interventions and screening instruments.

E. Biopsychosocial Model

1. Theories of behavior and behavioral change, such as behavioral reactions to pain and limitations, and coping strategies, etc. relevant to OMPT assessment and management.

2. Specific indications, diagnostic tools, and interventions based on behavioral principles.

3. Role of the biopsychosocial model in relation to OMPT (e.g. interprofessional management strategies as well as client examination and management strategies that address psychosocial and personal factors in relation to pain and disability).

4. The influence of the OMPT physical therapist's behavior on the patient's behavior, and vice versa.

5. Patient-centered, culturally competent care, related to the biopsychosocial model.

V. Orthopaedic Manipulative Therapy Theory and Practice

A. OMPT theory of assessment and diagnosis

1. Management: selection and application of OMPT interventions
2. Indications/contraindications to OMPT
3. Professional issues relevant to OMPT practice
4. Knowledge of manipulative therapy approaches practiced within physical therapy, medicine, and osteopathy and chiropractic.

VI. Wellness Programs

A. Nutrition

B. Psychosocial issues related to health and wellness

C. Resiliency (the ability to recover quickly and thoroughly from disruptive change).

D. Physical activity and fitness

E. Functional medicine, considering patient health and wellness, based on all components of lifestyle.

F. Promotion of wellness and prevention through the education of patients, caregivers, health care professionals, and the public.

Although the exact wording may differ, the areas of foundational knowledge listed above include all of the following outcomes from the IFOMPT Educational Standards:

Critically apply knowledge of anatomy, physiology and biomechanics to enable evaluation of normal and abnormal function.

Demonstration of the critical use of a comprehensive knowledge base of the biomedical sciences in the speciality of OMPT.

Critically evaluate knowledge informing pathology, pathogenesis, and pain mechanisms underlying mechanical dysfunction of the NMS system.

Critically apply theory of behaviour and behaviour change to effective OMPT assessment and management.

Demonstration of critical use of a comprehensive knowledge base of the clinical sciences in the speciality of OMPT.

Use advanced clinical reasoning to integrate scientific evidence, clinical data, and biopsychosocial factors related to the clinical context.

Chapter 6: Evidence-Informed Practice: Examples of Objectives for Teaching Critical Analysis of the Scientific and Clinical Literature

The following behavioral objectives may assist directors of fellowship programs in designing coursework related to evidence-informed practice and assist clinicians in selecting coursework and/or programs to advance their skills in critical inquiry.

A. Describe the characteristics and principles that determine the credibility of an experimental research report.

1. Identify and assess the significance of the experimental question
2. Assess the relevance of the reviewed literature
3. Assess the clarity and appropriateness of a testable hypothesis
4. Discuss sampling and the use of control subjects
5. Assess the chosen research design
6. Assess the appropriateness of key methods
7. Assess the performed analysis (data processing and statistical analysis)
8. Assess the appropriateness of the conclusions drawn from the results of this experiment.
9. Assess the contribution of the major findings to the existing literature

B. Describe characteristics that determine the credibility of a clinical case report

1. Identify the unique characteristics of the clinical problem
2. Assess the relevance of the supporting literature
3. Assess the choice of patient/subject selection and description
4. Assess the appropriateness of the evaluation and treatment choices
5. Analyze the chosen outcome measures
6. Discuss the interpretation of the findings
7. Assess the appropriateness of the conclusions
8. Assess the contribution of the findings to the existing literature

C. Collect, examine and critically analyze a body of clinical and scientific literature

1. Define the question
2. Describe and summarize a chosen compilation of published reports
3. Select and utilize appropriate critical appraisal tools in order to identify appropriate strengths and limitations of the selected published reports.
4. Draw appropriate, defensible conclusions about the chosen published reports
5. Synthesize the literature, provide a conclusive summary, and relate it to the original question.

D. Assess the relevance of a published report to practice

1. Describe and discuss the levels of evidence used in clinical research and apply the concept to a particular study.
2. Assess if a published report has sufficient credibility and utility for application to practice.
3. Describe the patient populations to whom the results are applicable

4. Describe the circumstances necessary for valid application of the results to a patient.

E. Contribute to the OMPT literature

1. Independently or as a part of a research team, contribute to components of or to the complete research process. This may include:
    a. Development of a research question
    b. Development of a proposal
    c. Implementation of the protocol
    d. Collection of data
    e. Analysis of data
    f. Reporting of results (including discussion and conclusions)
    g. Dissemination of the findings (e.g. presentation at state or national conferences; submission of a manuscript to a peer-reviewed journal)
2. Submit a case report
3. Submit a literature review of a meaningful clinical topic
4. Submit a "theory" or "perspective" paper
5. Develop technology to be used in PT education or direct patient care delivery

Chapter 7: Summary of Practice Analysis

The 2018 OMPT Description of Advanced Specialty Practice (DASP) was developed by a special Task Force appointed by the AAOMPT Board of Directors. The Task Force consisted of seven members, all physical therapists who are AAOMPT Fellows with broad experiences, backgrounds, and geographic settings. The core group and a consultant determined the practice analysis plan. All procedures were reviewed with a content expert group (described below) as well as the President and the Board of Directors of the AAOMPT.

Review and Revision of the DACP for Orthopaedic Manual Physical Therapy

The starting point was the Description of Advanced Clinical Practice (DASP) of Orthopaedic Manual Physical Therapy, developed and published by the AAOMPT in 2008.[7] Charged with developing a plan for revising the DASP, AAOMPT leaders hired an outside consultant. In May 2016, the Task Force and consultant met via conference call and developed a set of goals and timelines, along with a pro forma outline of the development plan. During the conference call, the group decided that it would not be necessary to re-survey every item in the existing DASP since they felt there was "no need to resurvey the obvious." In addition, considering that resurveying the entire DASP would require a 1.5-2-hour commitment by respondents and result in a lower response rate, they wanted to field as short a survey as possible in order to respect respondents' time and maximize response rates.

The Content Expert Group of 10 AAOMPT members augmented the Task Force as an advising and approval body for the development of both a pilot survey and the final survey. Task Force members also communicated directly with Content Expert Group members for their detailed comments/suggestions regarding what changes had occurred in OMPT practice over the previous 10 years, and their suggestions for revising the existing DASP.

The seven Task Force members were chosen based on a number of criteria:

1. Regional or geographic distribution
2. Practice setting diversity
3. Number of years practicing OMPT
4. Ethnic and gender diversity
5. Clinicians and academic educators
6. Fellowship graduate or director with exposure to residency or fellowship curriculum
7. Previous work on the 2008 DASP revalidation/revision

The Task Force met in person with the consultant for two days in Louisville, KY, in September 2016. Prior to the in-person meeting, Task Force members reviewed the existing DASP and reflected on changes in practice or trends that were not clearly

presented in that document. In addition, each Task Force member networked with specific members of the Content Expert Group for their ideas and suggestions and solicited the same information from two to three other professional colleagues who were also AAOMPT Fellows.

The purpose of the in-person Task Force meeting was twofold. First, the Task Force identified changes in OMPT practice as well as emerging trends from across the previous ten years that should be surveyed for possible inclusion in the survey, and ultimately the new DASP. The group also reviewed the existing DASP to identify what items were obviously still part of the specialty practice and would not need to be surveyed. The group determined that some items did not need to be surveyed but did need some editing. They also reviewed the 2008 DASP to ensure that the most recent IFOMPT Education Standards were addressed. If the Task Force discerned that the editing significantly changed the meaning of an existing item, then that item was included in the survey. The discussion and development of the survey continued after the meeting via phone calls and email and using Google Docs© for changes. The draft survey was shared with the content expert group for their input. Through consensus decision-making, the result was a pilot survey of 41 items to be surveyed. The survey was approved in January 2017.

Survey Format

The pilot survey was set up on Survey Monkey© using the ABPTS format in terms of survey scales. Section 1 addressed knowledge areas expected of the OMPT specialist. Items were rated on three scales: frequency on a 5-point Likert-type scale, with 0 being *never* and 4 being *daily*; importance on a 4-point Likert-type scale, with 0 being *not important* and 3 being *very important*; and level of judgment on a similar 4-point scale, with 0 as *do not use* and 3 as *analysis*. Section 2 dealt with professional roles and responsibilities, and Section 3 focused on practice expectations in patient/client management. Both sections 2 and 3 were rated on the same scales of frequency and importance, and an additional 4-point level of mastery scale, with 1 being "advanced beginner" and 4 being "expert." Section 4 contained a small number of demographic questions.

At the in-person meeting, the Task Force established a priori decision rules for reviewing survey results. Those rules were as follows: In Section 1 (knowledge areas), items would be included if at least 65% of respondents rated the item's importance at a 2 or 3 (moderately or very important) and level of judgment at a 2 or 3 (application or analysis). For Section 2 (Professional Practice Expectations in Acute Care: Professional Roles, Responsibilities and Values), and Section 3 (Practice Expectations, Patient/Client Management), items would be included in the DASP if at least 65% of the respondents rated the item at a 2 or 3 with respect to importance (moderately or very important) and at a 2 or 3 with respect to level of mastery (proficient or expert skill level). Concerning frequency, items would be included if at least 65% of respondents rated the item at a 3 or 4 (daily or weekly). In the event of a discrepancy, such as an importance rating that would meet the decision rule and a level of mastery rating that would not, the Task Force would be called on to carefully review the item and decide as to whether to include the

item. In all close cases, the Task Force group would come to a consensus with respect to keeping or eliminating the item. The rationale for eliminating an item was a consensus that it would be something that both an entry-level PT and the advanced OMPT use or perform, although not one that would distinguish between entry-level and advanced practice.

Survey Administration and Results

The purpose of the pilot survey was to ensure clarity of the survey questions and identify any new competencies that should be incorporated into the final survey**.** The pilot survey was sent to a convenience sample of 27 AAOMPT colleagues of Task Force members who had provided input/suggestions to the members prior to the first meeting. With 12 respondents, the response rate was 44.4%. After review of pilot survey results, the survey was finalized. Except for minor editorial changes, the final survey mirrored the pilot survey. Feedback from the pilot survey indicated the survey required 20-30 minutes to complete.

The final survey was sent to all 1,170 AAOMPT Fellows in May 2017. The AAOMPT staff sent multiple reminders to complete the survey, and the survey was closed in July 2017. Respondents were given an opportunity to call or e-mail the project coordinator or project consultant if they had questions about the survey. A total of 486 Fellows responded, which constitutes a response rate of 40.1%. Applying the agreed-upon decision rules, six items emerged as not meeting the criteria; five with respect to frequency and one with respect to for level of mastery. The vast majority of items scored well above the 65% cutoff level for retention—typically in the 80% to 90% levels. During a conference call the Task Force discussed each item and decided to retain all 6 items as part of this revised DASP document.

The final document is a combination of the items that were surveyed as well as the items from the previous DASP that the Task Force believed were clearly still part of advanced practice in OMPT and did not need to be surveyed.

Conclusion

The broad representation of Task Force and Content Expert Group members, and the level of consensus regarding survey analysis, indicates that the documents resulting from the process of revalidation can be relied upon to accurately reflect the advanced practice of OMPT in 2018. The decision to not resurvey the entire DASP resulted in a much shorter survey requiring 75% less time to complete, and likely contributed significantly to the higher response rate for this iteration of the revision. The dedication of all members to the process, and careful reflection and discussion of each item was exceptional; all participating members deserve sincere thanks from present and future AAOMPT Fellows.

Appendix 1: Glossary

Assessment The measurement or quantification of a variable or placement of a value on something. Assessment should not be confused with *examination* or *evaluation*.[1]

Clients Individuals who are not necessarily sick or injured but who can benefit from a physical therapist's consultation, professional advice, or services. Clients are also businesses, school systems and others to whom physical therapists offer services.[1]

Competence The requisite knowledge, abilities, and qualities needed to be a physical therapist.[1]

Diagnosis Both a process and a label. The diagnostic process performed by the physical therapist includes integrating and evaluating data that are obtained during the examination to describe the patient/client condition in terms that will guide the prognosis, the plan of care, and intervention strategies. Physical therapists use diagnostic 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.[4]

Disability 1) The inability to perform, or a limitation in the performance, of actions, tasks, and activities expected in specific social roles that are customary for the individual or expected for the person's status or role in a specific sociocultural context and physical environment.[2] 2) Impairments, activity limitations, and participation restrictions in the context of what an individual can do in a standard environment and in his/her usual environment. (WHO International Classification of Functioning, Disability and Health[5])

Disease A pathological condition or abnormal entity with a characteristic group of signs and symptoms affecting the body, with known or unknown etiology.[4]

Disorder Derangement or abnormality of function (anatomic or physiologic); pathology.[5]

Dysfunction Disturbance, impairment, or abnormality of function of an organ.[4]

Episode of Physical Therapy Care All physical therapy services that are: 1) provided by a physical therapist; 2) provided in an unbroken sequence; and 3) related to the physical therapy intervention for a given condition or problem, or related to a request from the patient/client, family, or other health care providers.[4]

Examination A comprehensive and specific testing process performed by a physical therapist that leads to diagnostic classification or, as appropriate, to referral to another practitioner. The examination has three components: the patient/client history, the systems review, and tests and measures.[4]

Evaluation A dynamic process in which the physical therapist makes clinical judgments based on data gathered during the examination. No defined number or range of visits is established for this type of episode.[4]

Evidenced-informed Practice A model that incorporates best available research evidence; clients' needs, values, and preferences; and practitioner wisdom and theory into the clinical decision-making process filtered through the lens of client, agency, and community culture.[3,10]

Fellowship Education A postprofessional, funded, and planned learning experience in a focused area of physical therapist clinical practice, education, or research (not infrequently targeted for post-doctoral, post-residency-graduated, or board-certified physical therapists). (www.apta.org)

Functional Limitation A restriction of the ability to perform a physical action, activity, or task in a typically expected, efficient, or competent manner.[4]

Functioning Refers to all body functions, activities and participation in the context of what an individual can do in a standard environment and in his/her usual environment.[9]

History A systematic gathering of data—from both the past and the present—related to why the patient/client is seeking services of the physical therapist. The data that are obtained (e.g. through interview, through review of the patient/client record, or from other sources) include demographic information, social history, and information about employment and work (job/school/play), growth and development, living environments, general health status, social and health habits (past and current), family history, medical/surgical history, current conditions or chief complaints, functional status and activity level, medications, and other clinical tests. While taking the history, the physical therapist also identifies health restoration and prevention needs and coexisting health problems that may have implications for intervention.[4]

Informed Consent The voluntary and revocable agreement of a competent individual to participate in a therapeutic or research procedure, based on an adequate understanding of its nature, purpose and implication.[8]

Impairment A loss or abnormality of physiological, psychological, or anatomical structure or function.[4]

Intervention The purposeful interaction of the physical therapist with the patient/client, and when appropriate, with other individuals involved in patient/client care, using various physical therapy procedures and techniques to produce changes in the condition.[4]

Manual Therapy Techniques Skilled hand movements intended to improve tissue extensibility; increase range of motion; induce relaxation; mobilize or manipulate soft tissues and joints; modulate pain; and reduce soft tissue swelling, inflammation, or restriction.[4]

Mobilization/Manipulation A manual therapy technique comprising a continuum of skilled passive movements to the joints and/or soft tissues that are applied at varying speeds and amplitudes, including small amplitude/high velocity therapeutic movement.[4]

Motor Control The ability of the central nervous system to control or direct the neuromotor system in purposeful movement and postural adjustments by selective allocation of muscle tension across appropriate joint segments.[4]

Motor Deficit A lack or deficiency of normal motor function (motor control and motor function) that may be result of pathology or other disorders. Weakness, paralysis, abnormal movement patterns, abnormal timing, coordination, clumsiness, involuntary movements, or abnormal postures may be manifestations of impaired motor function (motor control and motor learning).[4]

Motor Function (motor control and motor learning) The ability to learn or demonstrate the skillful and efficient assumption, maintenance, modification, and control of voluntary postures and movement patterns.[4]

Muscle Tone The velocity-dependent resistance to stretch that muscle exhibits.[4]

Neural Mobility The ability of the nervous system to adapt to tensile loads including: 1) gross movements of elements of the nervous system in relation to anatomic interfaces with other structures; and 2) intraneural movements consisting of neural tissue elements moving in relation to the connective tissue components of nerve tissue (e.g. endoneurium, perineurium).[2]

OMPT Advanced Practitioner A physical therapist who demonstrates professional behaviors and advanced clinical knowledge, judgment, and level of practice, achieved through orthopaedic manual physical therapy fellowship education, postprofessional degree work, and/or relevant clinical experience and course work.

Pain A disturbed sensation that causes suffering or distress.[4]

Plan of Care Statements that specify the anticipated goals and the expected outcomes, predicted level of optimal improvement, specific interventions to be used, and proposed duration and frequency of the interventions that are required to reach the goals and outcomes. The plan of care includes the anticipated discharge plans.[4]

Posture The alignment and positioning of the body in relation to gravity, center of mass, and base of support.[4]

Prognosis The determination by the physical therapist of the predicted optimal level of improvement in function and the amount of time needed to reach that level.[4]

Psychomotor Refers to motor activity that is preceded by or related to mental activity.[6]

Residency Education A planned program of postprofessional clinical and didactic education that is designed to advance significantly the physical therapist's preparation as a provider of patient care services in a defined area of clinical practice. (www.apta.org)

Screening Determining the need for further examination or consultation by a physical therapist or for referral to another health professional.[4]

Symptoms Any subjective evidence of disease or of a patient/client's condition.[5,9]

Tests and Measures Specific standardized methods and techniques used to gather data about the patient/client after the history and systems review have been performed.[4]

Thrust Manipulation A high velocity, low amplitude therapeutic movement within or at end range of motion.[6]

Treatment The sum of all interventions provided by the physical therapist to a patient/client during an episode of care.[4]

Appendix 2: References

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5. *International Classification of Functioning, Disability and Health (ICF).* 2001. World Health Organization. www.who.int/classification/icf

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Appendix 3: Curriculum Requirements for ABPTRFE-Accredited Orthopaedic Manual Physical Therapy (OMPT) Fellowships

The American Board of Physical Therapy Residency and Fellowship Education (ABPTRFE) of the American Physical Therapy Association (APTA) accredits postprofessional OMPT fellowship programs that meet standards for organization, resources, curriculum, and performance measures.

Postprofessional clinical residency and fellowship programs are one of the primary means of training physical therapists to develop superior postprofessional clinical skills, advanced knowledge in a specialized area of clinical practice, and the ability to function as clinical educators, consultants and advocates for their peers, patients and clients.

Residency or Fellowship?

Residency or fellowship training is designed to significantly advance the licensed physical therapist's preparation as a provider of patient care services in a defined area of clinical practice. There are multiple residencies and fellowships within a variety of specialty and subspecialty areas of practice. Orthopaedic manual physical therapy is considered an advanced subspecialty of orthopaedics, and therefore programs in this area are designated as fellowship programs.

Clinical Fellowship Programs

A clinical fellowship program[1,2] is a postprofessional planned learning experience in a focused area of clinical practice for residency-graduated or board-certified physical therapists.

To be eligible for accreditation as a clinical fellowship program for physical therapists, a clinical fellowship program must execute a curriculum that:

1. Meets the educational standards of IFOMPT
2. Is focused, with advanced clinical and didactic instruction within a subspecialty area of practice.
3. Is intensive and includes extensive clinical experiential learning
4. Provides a sufficient and appropriate patient population to create an environment for advanced clinical skill building.

A fellowship program is designed to provide greater depth in a specialty or subspecialty area than that which is covered in a residency program. Any applicant to a clinical fellowship program must be licensed in the US as physical therapist and must possess one or more of the following qualifications on intake into the fellowship program:

1. Specialist certification
2. Completion of a residency in specialty area

International and National Standards of OMPT

The International Federation of Orthopaedic Manipulative Physical Therapists (IFOMPT) is an organization of specialist physiotherapists/ physical therapists with an internationally recognized post-graduate qualification. IFOMT is a member organization (MO) of the World Confederation of Physical Therapy (WCPT).

Our national governing body, the APTA, recognizes the American Academy of Orthopaedic Manual Physical Therapists (AAOMPT) as its representative body in the international organization. The AAOMPT is a MO of IFOMPT.

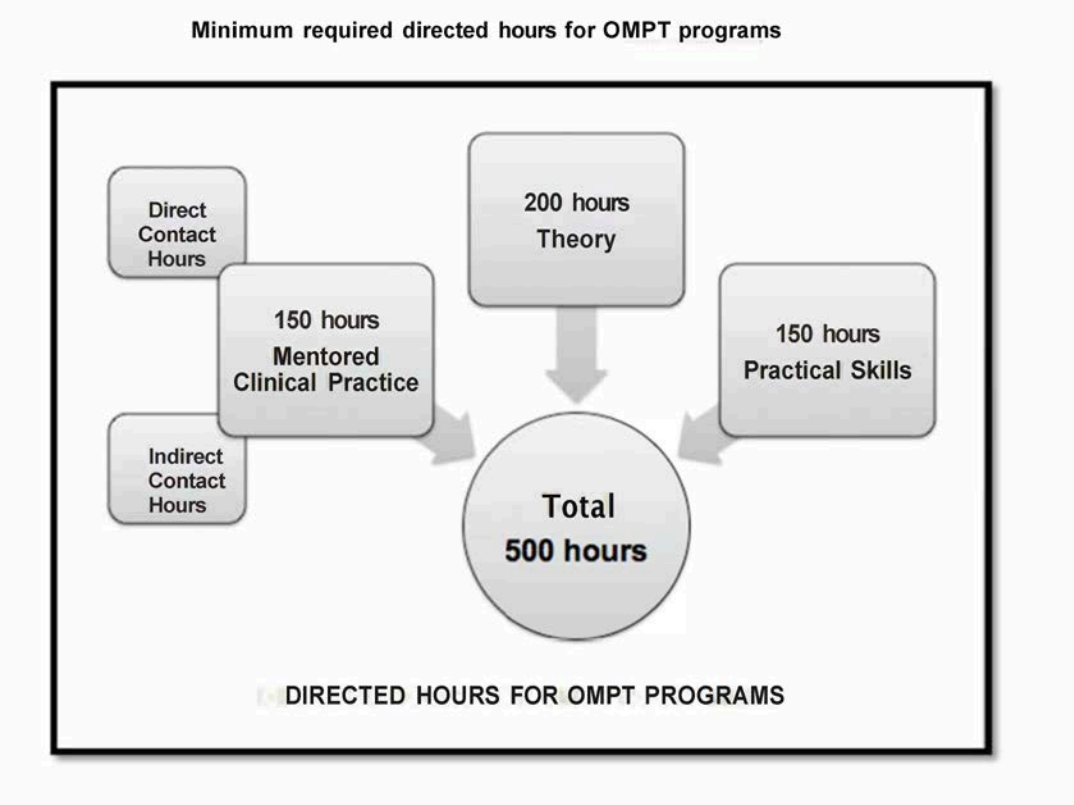
Member organizations are admitted if their standards meet or exceed IFOMT standards.[3]

The OMPT fellowship programs in the US that are currently approved by the AAOMPT and accredited by the APTA meet standards set by the APTA and the AAOMPT.[1,3,4] These organizations also have regular re-accreditation processes and formal reviews of the standards.

Minimum curricular requirements for OMPT programs, within the total 1,000 hours required by ABPTRFE, must include:

1. 150 hours of mentored clinical practice, with 75 hours being mentored directly 1:1 by a Fellow of AAOMPT.
    a. The required 150 hours of MCP can consist of a combination of direct and indirect contact hours.
    b. Direct contact hours with the clinical mentor must include observation of the student assessing and managing patients in the practice setting. Direct contact can be achieved through electronic resources. Direct contact can be with a single or more than one student; for example, practical skill sessions with multiple students working together with the mentor can be a valuable strategy.

2. 200 hours of didactic or theory-based education
   150 hours of practical skill instruction



SPECIFIC CURRICULUM REQUIREMENTS FOR ORTHOPAEDIC MANUAL PHYSICAL THERAPY (OMPT) FELLOWSHIP PROGRAMS

DASP

The curriculum of the OMPT fellowship program is based on the Description of Advanced Specialty Practice (DASP) in OMPT developed by AAOMPT. The fellowship program must illustrate how the curriculum addresses each practice dimension in the DASP and which dimensions are strengths versus areas for future growth.

OMPT Curricular Elements

National and international standards for OMPT programs contain a combination of prescriptive elements and outcome measures. These components of the standards are dynamic in nature. The curriculum requirements to become an accredited OMPT fellowship program are embedded within this document. These requirements are evaluated through reviews by APTA and a specific external assessor process as delineated by IFOMPT.

Bibliography and Resources

The websites of the organizations listed below provide current information on standards of OMPT programs reflected within this document. Key words that can guide searches: fellowship, OMPT, standards, education.

www.abptrfe.org; www.aaompt.org; www.ifompt.org

1. *Post-professional Clinical Residency and Fellowship Program Accreditation Application.* Alexandria, Virginia. American Physical Therapy Association; www.apta.org

2. *Clinical Residency and Fellowship Program Credentialing—Frequently Asked Questions.* Alexandria,Virginia. American Physical Therapy Association; 2006 www.apta.org; www.abptrfe.org

3. *IFOMT Standards Document, appendix 2.* International Federation of Orthopaedic Manipulative Therapists; 2016 www.ifomt.org

4. *Additional Requirements for Postprofessional Clinical Fellowship Programs In Orthopaedic Manual Physical Therapy.* Alexandria, Virginia. American Physical Therapy Association; 2006. www.apta.org

Appendix 4: History of the American Academy of Orthopaedic Manual Physical Therapists (AAOMPT)

AAOMPT Today

Established in 1991, the American Academy of Orthopaedic Manual Physical Therapists (AAOMPT) is an organization of physical therapists with special interest and advanced training in orthopaedic manual physical therapy (OMPT). AAOMPT has over 3200 members in the United States (US) and overseas including Fellows who meet training, professional and practice standards related to advanced practice in OMPT; physical therapist members and student physical therapists with interest in OMPT. Membership in AAOMPT has grown gradually. After the first ten years (2002), membership had grown to 1,200 with Fellow members totaling 313. Twenty years later (2012), membership numbers reached 2,139 with Fellow members at 760. At the time of this publication membership numbers had reached 3218 with Fellow members totaling 1,531. AAOMPT will continue to grow with members and Fellows who are meeting OMPT standards that are accepted internationally.

AAOMPT has a collaborative relationship with the American Physical Therapy Association (APTA) that includes a formal Memorandum of Understanding (MOU). AAOMPT works closely with the elected leadership and staff of APTA and with the leaders and staff of the American Academy of Orthopaedic Physical Therapy (AOS), the component of the APTA that represents members interested in orthopedic physical therapy. AAOMPT is recognized by the APTA as the organizational representative of the United States to the International Federation of Orthopaedic Manual Physical Therapy (IFOMPT). Since 2000, the AAOMPT and APTA have worked collaboratively on the accreditation of OMPT residency and fellowship programs. The AAOMPT-APTA collaborative relationship is strong yet dynamic, responding as necessary to the needs of members of both organizations and the patients they serve.

How & Why AAOMPT was Established

How

AAOMPT was established by the collaborative efforts of the organizations Founding Fellows, Dr. Richard (Dick) Erhard, Dr. Joe Farrell, Dr. Ola Grimsby, Dr. Kornelia Kulig, Dr. Michael Moore, Dr. Stanley Paris, Dr. Michael Rogers, and Dr. Bjorn Svendsen. Each of these individuals ran residency and continuing education programs in the US that provided advanced training to physical therapists in OMPT. Each of the founders completed mentored training earlier in their career and had practiced and taught OMPT for many years. Each individual was recognized nationally and internationally for their expertise as clinicians, as educators and for their professionalism, leadership and vision.

During the summer of 1991, the individuals who became the AAOMPT Founding Fellows met at Oakland University in Rochester, Michigan where Dr. Kulig and Dr.

Svendsen practiced and taught OMPT residents. The meeting was called in part in response to the urging of Norwegian orthopaedic manual therapist and international leader in OMPT, Dr. Freddy Kaltenborn. The end result of that meeting was the establishment of a new professional organization that aimed to serve the interests and needs of the growing population of physical therapists practicing OMPT in the US. The Founding Fellows agreed to reconvene in San Francisco, California in February 1992 in conjunction with the American Physical Therapy Association (APTA) Combined Sections Meeting (CSM). The purpose of the San Francisco meeting would be to develop structure for the organization; clarify its purpose; and set short and long-term goals, timelines and strategies to meet the established goals.

During the 1992 San Francisco meeting the Founders agreed on a leadership structure, elected officers and established key committees including the OMPT Residency Standards Committee, OMPT Examination Committee, Membership Committee and Bylaws Committee. Membership categories were established with a Fellow category to be reserved for individuals who completed OMPT clinical mentoring or residency programs that met the standards they intended to establish. They recognized it would be necessary to create a challenge process for individuals already practicing in OMPT for whom recombined clinical training programs had not been available but who had the level of clinical expertise consistent with the outcomes of residency training.

The original officers of AAOMPT elected at that meeting were:

President:	Joe Farrell
Vice President:	Dick Erhard
Secretary:	Michael Moore
Treasurer	Ola Grimsby
Member at large;	Stanley Paris
Membership Chair:	Michael Rogers

In addition to the Founding Fellows, the 1992 San Francisco meeting was attended by Carol Jo Tichenor Director of the Kaiser Permanente Hayward OMPT Residency in the San Francisco Bay area and Patricia (Trish) King (then King Baker), Director of Education at the University of St. Augustine. At the request of the Founding Fellows, Carol Jo and Trish participated in discussions and decisions regarding structure and goals of the organization. Carol Jo Tichenor became the chair of the Standards Committee, working with Joe Farrell and Kornelia Kulig. Trish King worked on the Examination Committee along with Richard Erhard (Chairperson), Bjorn Svendsen and Ola Grimsby.

Why

The purpose of the 1991 Oakland University meeting was for the leaders of US based OMPT education programs to discuss common issues facing orthopaedic manual physical therapy in the United States. Foremost on the agenda were the topics of standards for residency training in the US and US membership in the International Federation of Orthopaedic Manual Physical therapists (IFOMPT). In 1991, the United States did not qualify as a member of IFOMPT, hence physical therapists with interest in OMPT in the US, could not participate in IFOMPT meetings as members and the US had no elected representation to IFOMPT.

Qualifications for IFOMPT membership include the existence of standards for practical clinical training and examination in OMPT sanctioned by the WCPT member organization of that country (APTA for the US). In 1991, APTA chose not to establish standards for clinically based specialty training (residency) or for practical exams as a part of specialty board certification. The US had a process to recognize physical therapy clinical specialists via ABPTS which did not require practical examination nor mentored clinical training. During the 1991 Oakland meeting and the 1992 San Francisco meeting, the AAOMPT Founders committed to create an organization that would set standards for OMPT clinical residency training in the US, create a community for professional development in OMPT in the US, and ultimately gain recognition of the US as a member of IFOMPT.

. Original Objectives of the AAOMPT

To create a member organization that would serve to:

- provide a mechanism of national accreditation and approval of orthopaedic manual physical therapy residency programs;

- provide a forum where persons having a common interest in orthopaedic manual physical therapy could meet, confer and promote their research, practice and patient care;

- seek membership of the AAOMPT in the International Federation of Orthopaedic Manipulative Therapists (IFOMPT); and

- seek cooperation with the APTA in furthering the goals of the physical therapy profession.

1992-AAOMPT Recognized by APTA as the Official US Representative to IFOMPT

June 1992: AAOMPT Founders met in Vail, Colorado prior to and during IFOMPT Conference. Dr. Jan Richardson, President of AOS (then the APTA Orthopaedic Section) attended the conference representing the APTA. Dr. Richardson reported to the IFOMPT leadership that APTA recognized AAOMPT as the representative organization in the US that established standards for OMPT training. Based on the APTA's recognition of AAOMPT, the IFOMPT Board of Directors voted to accept the US as a member country pending submission of the clinical residency standards document that AAOAMPT had in development.

This was a landmark event that was the result of months of negotiations between he AAOMPT founders and AOS and APTA officers and boards as well as months of behind the scenes work drafting standards for residency training. The negotiations with APTA were difficult, however, common ground was identified and the collaborative relationship between AAOMPT and APTA that continues today began.

1992-1994 AAOMPT Develops First Standards for PT Clinical Residency in US
The initial task of the Standards Committee was to develop clear standards for physical therapy residency training in OMPT. The responsibility of the Standards Committee soon broadened to include the tasks of establishing procedures to evaluate residency programs based on those standards.

1994-2000: AAOMPT Develops First Process in US to Recognize Clinical Residencies
The processes, policies and standards developed by the AAOMPT Exam and Standards Committees resulted in the first clinical residency review and recognition process in the US. AAOMPT labeled this process "credentialing". AAOMPT's residency credentialing process and was the precursor to today's physical therapy residency and fellowship accreditation process. The AAOMPT residency credentialing process launched in 1994. Dr. Mike Koopmeiners, MD, a family practice physician from Minneapolis, provided consultation on residency standards and credentialing process, applying information from physician residency accreditation to physical therapy residencies.

AAOMPT credentialed clinical residencies in OMPT until 2001 and during that time was the sole organization in the US with standards and process to evaluate clinical residency training programs in physical therapy specialty areas.

AAOMPT Establishes Decriptions of Advanced Specialty Practice

Description of Advanced Specialty Practice (DASP) or Description of Specialty Practice (DSP) documents are validated descriptions of specialty (residency) and advanced specialty (fellowship) practice. These documents are developed from a practice analysis and serve as the basis from which standards for residency and fellowship training and specialty board examinations questions are developed. The first document describing OMPT practice was developed by AAOMPT in the late 1990s, an effort led by Carol Jo Tichenor, Kornelia Kulig and Trish King with assistance and support from all the AAOMPT Founding Fellows. The document was revised in 2008 led by Robert H. Rowe & Carol Jo Tichenor, Co-Chairs and task force members Stephania L. Bell, William Boissonnault, Patricia M. King, Kornelia Kulig, and Ann Porter Hoke. A Content Expert Panel was utilized in 2008 including Steve Allen, Maggie Fillmore, Joe Godges, Brad Jordan, Pieter Kroon, Elaine Lonnemann, Patty McCord, Yogi Matharu, *Stephen C. F. McDavitt*, Catherine Patla, Daniel G. Rendeiro, Phillip S. Sizer Jr., and Patty Zorn. In 2018, the AAOMPT appointed a new task force to once again update the document which serves as the basis for standards for fellowship training in OMPT. The 2018 Task Force is led by Mike Puniello (Chair), with task force members Carol Courtney, Laurie Devaney, Trish King, Elaine Lonnemann, Richard Kring, Dan Rendeiro, and Jeannie Bryan Coe (Consultant). This group performed a practice analysis and revised the 2008 DASP. The content expert panel included: Gail Deyle, Pieter Kroon, Patricia McCord, Stephen McDavitt, Cameron McDonald, Catherine Patla, Ann Porter-Hoke, Robert Rowe, Philip Sizer, and Carol Jo Tichenor.

1998-2006 AAOMPT Fellow Challenge Exams

The AAOMPT Exam Committee established a process for challenge exams for long established OMPT practitioners who would not/did not have opportunity to gain fellow status through credentialed residency programs.

2001-2019 AAOMPT & APTA Collaborate on Clinical Residency Accreditation

In 2001 AAOMPT and the American Physical Therapy Association (APTA) agreed that the APTA would take over responsibility of credentialing clinical OMPT Residency/Fellowship programs. The APTA accepted the core components from the AAOMPT "Standards for Orthopaedic Manual Physical Therapy Residency Training" as critical elements that must be in place for a program to be credentialed (i.e., supervised clinical hours and examinations including practical examinations), and the APTA agreed to allow the AAOMPT to name a representative to serve on the APTA Credentialing Committee for at least 2 three-year terms.

Beyond Residency & Fellowship Standards: AAOMPT as a Professional Association
AAOMPT was formed address the need to promote, standardize, and accredited clinical training programs in physical therapy specialties. AAOMPT's initial mission resulted in the origination of residency and fellowship accreditation in the US. The organization has grown exponentially and is positioned to advocate for its members, the physical therapy professional and the patients and clients served by physical therapist practice. Committees are in place that monitor and promote best practice in OMPT. The AAOMPT conference offers high level educational opportunities integrated with OMPT research. Conference programming provides members with opportunities for developing relationships, mentorship, teaching, and research. AAOMPT collaborated with the Canadian Manual Therapy Association (CAMPT) when IFOMPT was held in Quebec City in 2012 and the AAOMPT Business meeting was held at the conference in lieu of our own conference that year. The AAOMPT conference has evolved over the years with the development of specialty tracks in the programming to provide learning opportunities specific to the needs of the fellowship programs, special interest groups and students. However, the focus continues to be on providing members time to meet and on advancing the science and understanding of clinical practice in OMPT.

PART 2

APTA-AAOMPT: Collaborative History 1992-2019
Details of how OMPT specialty practice descriptions and residency and fellowship standards were developed and implemented in the US

A distinctive relationship exists among the AAOMPT, the International Federation of Orthopaedic Manipulative Physical Therapists (IFOMPT), and the APTA. IFOMPT is a specialty subgroup of the World Confederation of Physical Therapy (WCPT) and is the organization that oversees OMPT at the international level in terms of educational standards, practice guidelines, etc. To become a member organization of IFOMT, a manual therapy organization must be able to meet IFOMPT education Standards by demonstrating a quality educational training program in manual physical therapy, and it must also be recognized by the country's parent professional association as the spokes group for manual physical therapy in that country. The APTA is a member organization of the WCPT and is the parent organization responsible for recognizing the representative from the United States as a member organization of IFOMPT. Therefore, the APTA has recognized the AAOMPT as the United States' member organization to IFOMPT.

APTA Residency & Fellowship Accreditation

The APTA's residency and fellowship accreditation process began when APTA absorbed the AAOMPT credential process for OMPT programs in 2001. The term "credentialing" was later changed to "accreditation" in December 2013. Currently, APTA through ABPTRFE, has two levels of recognition of post-professional clinical training: residency and fellowship. Residency is an advanced level of clinical training that is available to individuals interested in improving their psychomotor skill and knowledge within a specific area of practice. Fellowship is an advanced level of training for individuals with prior expertise in a particular area where they can develop new psychomotor skills and knowledge in a more specific subspecialty area of clinical practice. In addition to the clinical and traditional (didactic coursework in the basic and applied sciences, at the core of clinical residency and fellowship curriculum is an extended period of mentoring with highly skilled clinicians.

Collaboration with APTA

For many years there has been a tremendous level of synergy and collaboration between the AAOMPT, the APTA, and the APTA Orthopaedic Section with the goal of improving the quality of care provided to patients by physical therapy practitioners. AAOMPT membership are members of the APTA, so there is a tremendous amount of carry over between the memberships of the two organizations.

OMPT Transitions from Residency to Fellowship

During early conversations surrounding credentialing the APTA recognized that the AAOMPT clinical residencies were actually more in line with the criteria and standards

for a fellowship. Therefore, all AAOMPT clinical OMPT residencies were given the opportunity to be credentialed as APTA manual therapy fellowships during the conversion in December 2001. The AAOMPT continues to support the development of clinical manual therapy fellowship programs to advance skill level and knowledge of physical therapists in OMPT.

The AAOMPT continued to work with the APTA when the American Board of Physical Therapy Residency and Fellowship Education (ABPTRFE) became the accreditation body for all residency and fellowship programs in the United States. This was established by a motion from the APTA HOD in 2018 however, ABPTRFE had been performing this process after AAOMPT discontinued credentialing in until 2001 when the AAOMPT and the American Physical Therapy Association (APTA) agreed that the APTA would take over responsibility of credentialing clinical OMPT residency/fellowship programs.

Other examples of collaborative efforts between the AAOMPT, the APTA and the APTA Orthopaedic Section now the AOS, include the following:

- creation of the APTA Manipulation Task Force (1999) which evolved into the current day APTA Manual Therapy Workgroup, a staff workgroup of APTA that is comprised of members of the AAOMPT Practice Affairs Committee
- legislative networking as it relates to manual therapy across all chapters and sections;
- development of consistent terminology related to manual therapy and manipulation in APTA and AAOMPT consensus document;
- development of criteria for residency and fellowship programs in manual therapy;
- the AAOMPT has a representative member on the APTA Committee on Clinical Residency and Fellowship Program Credentialing;
- development of the Manipulation Education Manual (MEM);
- passage of PROCEDURAL INTERVENTIONS EXCLUSIVELY PERFORMED BY PHYSICAL THERAPISTS HOD P06-00-30-36 (Program 32) [Position];
- passage of CLINICAL CONTINUING EDUCATION FOR INDIVIDUALS OTHER THAN PHYSICAL THERAPISTS AND PHYSICAL THERAPIST ASSISTANTS HOD 06-02-26-49 (Program 65) [Initial HOD 06-01-28-28]; and
- Educational programming aimed at training individuals on mechanics of establishing a clinical residency and/or fellowship.

Collaborative Stands on Practice Issues

AAOMPT developed several position statements in support of professional practice that mirror or support efforts of the APTA including:

- Position on Life Long Learning
- Referral for Profit and Physical Therapy Services Position,"
- Evidence-based Practice Position,

Descriptions of Advanced Specialty Practice (DASP)

The Description of Advanced Specialty Practice (DASP) was updated in 2008 with the expectation that the document would continue to be used as the basis for curriculum development and assessment of clinical manual therapy fellowship (formerly residency) programs. In addition, the 2008 DASP served other, collaborative purposes for APTA and AAOMPT:

- as the core document for development of orthopaedic manual physical therapy (OMPT) Fellowship programs credentialed by the APTA,
- as the basis for potential revisions to the "Standards for Orthopaedic Manual Physical Therapy Fellowship Education,"
- as the basis for potential revisions to the "Guidelines for Curriculum Development for Post Professional Fellowships in Orthopaedic Physical Therapy and OMPT,"
- to influence the content of any national certification exam that may be developed in the future relative to the content of OMPT,
- to reflect the changing environment within the physical therapy profession as we move towards APTA's "Vision 2020," and
- to describe the practice of OMPT to individuals outside of the physical therapy community such as other health care providers, third party payers, and potential patients, etc.

APTA-AAOMPT Legislative Collaborations

2008:
AAOMPT has supported legislative and regulatory efforts of state chapters of APTA by funding advocacy events through the political affairs funds (PAF). Funding was provided for advocacy events for APTA State Chapters at the AAOMPT Annual Conferences in 2008 (Seattle, WA), 2010 (San Antonio, TX), and 2011 (Anaheim, CA).

2009:
APTA and AAOMPT collaborated on the development of a white paper titled *"Position on Thrust Joint Manipulation Provided by Physical Therapists."* This paper gave a historical overview of thrust joint manipulation and physical therapist education and practice. This document was critical for states in which chiropractors initiated legislative activities that implied that PTs are not adequately trained and therefore patients receiving thrust joint manipulation from a PT would be at risk. This paper presented the facts and research refuting this fallacy.

AAOMPT joined forces with APTA to promote advocacy for physical therapists through the development of Capitol Hill Day in which the members could meet with the legislators to discuss health care related issues that impact physical therapy. The AAOMPT provided funds from the Political Affairs Fund PAF to provide financial support for the Capitol Hill event held in 2009 during the AAOMPT Conference in conjunction with the APTA and the APTA Orthopaedic Section.

Scope of practice issues beyond thrust joint manipulation were discussed and advocated for at that time. The AAOMPT was the first association to publish a position on dry

needling (10/17/2009). The AAOMPT collaborated with the APTA and the Federation of State Boards of Physical Therapy (FSBPT) by sharing our statement with them and meeting to discuss the implications. The two scope of practice positions addressed included:

"It is the position of the AAOMPT Executive Committee that dry needling is within the scope of physical therapist practice.

"It is the position of the AAOMPT ultrasound imaging is within the scope of physical therapist practice.

AAOMPT International Collaborations

2012: AAOMPT collaborated with the Canadian Academy of Manipulative Therapy (CAMT) to support the IFOMPT Congress in Quebec City Canada by holding our annual business meeting and conference activities at the IFOMPT Congress that year.

MEMORANDUM OF UNDERSTANDING

2013: APTA-AAOMPT Collaborative Relationship Formalized through MOU

Paul Rockar and Bob Rowe, the APTA and AAOMPT presidents, respectively, signed a memorandum of understanding defining a Fellow as an individual who satisfies the Academy's (AAOMPT) requirements for membership in this category, as determined by the Academy. The APTA agreed to "adopt certain requirements from the Academy's process relating to clinical hours, mentoring hours, examinations, and curriculum." The MOU indicated that the "American Board of Physical Therapy Residency and Fellowship Education (ABPTRFE or Board) had the authority to prescribe and amend the requirements a program must meet in order to be credentialed, requirements that currently are embodied in the Evaluative Criteria for Residency and Fellowship Programs (Evaluative Criteria)." The APTA, through the ABPTRFE, was responsible for the operation of the credentialing process. The APTA agreed to designate one position on the ABPTRE to be reserved for a Fellow of AAOMPT. In addition, the AAOMPT was granted a member position the Credentialing Counsel.

A few excerpts from the 2013 "Memorandum of Understanding" are provided:

- "The Evaluative Criteria will continue to require an OMPT program to have a curriculum that has been developed from a valid analysis of practice, currently the Description of Advanced Specialist Practice (DASP) developed by the Academy. The Academy will continue to be responsible for maintaining and updating the DASP by conducting a revalidation study at least every 10 years in accordance with Board policies."

- “The APTA understands that the Academy is a member organization of the International Federation of Orthopaedic Manipulative Physical Therapists (IFOMPT or the Federation). The Federation is a recognized subgroup of the World Confederation for Physical Therapy (WCPT), of which the APTA is a member organization. Under the WCPT’s Articles of Association, a recognized subgroup such as the Federation must be composed of WCPT member organizations or groups recognized by their WCPT organization. The APTA has recognized the Academy for the purpose of its membership in the Federation. Members of a recognized group, such as the Academy, must be members of the WCPT member organization for the country in which the group is located.”

- “The APTA Board will make a good faith effort to ensure that the credentialing process satisfies the IFOMPT Standards.” And “if the Academy requests, the Board will require OMPT programs to undergo review by an External Assessor (EA) in the manner prescribed by the Federation with AAOMPT being responsible for the EA Process.”

Impact of the APTA-AAOMPT MOU

With the MOU in place, the AAOMPT was able to implement the international monitoring process. In 2014 the US submission of the AAOMPT International Monitoring Document to IFOMPT for fellowship programs to achieve IFOMPT’s educational Standards was approved by IFOMPT. This was significant in that the US representative of manual physical therapy, AAOMPT, was compliant with IFOMPT’s educational Standards.

IFOMPT Education Standards-Impact on APTA-AAOMPT Collaboration

IFOMPT’s educational standards were revised in 2016 and the APTA and AAOMPT worked together in the new accreditation process. ABPTRFE reviewers of OMPT included one Fellow of AAOMPT who was familiar with the 2008 DASP and was able to perform the external assessor review, which included the review of a mentoring session, review of the curriculum as presented within the IFOMPT template and review of research and scholarly activities of fellows in training. IFOMPT’s requirement to review each program in the US every three years didn’t follow the same timeline as ABPTRFE’s for re-evaluation of the OMPT programs. ABPTRFE’s reviews were completed on a five-year schedule for new programs and ten years for program that had successfully completed a re-evaluation. ABPTRFE worked with AAOMPT and permitted the external assessor (EA) review of programs by an AAOMPT EA reviewer to be performed independently.

ABPTRFE continues to operate under the APTA Board of Directors (BOD) Guideline (BOD G09-15-02-04). Under these guidelines the ABPTRFE determines the accreditation requirements for a residency or fellowship education program, and amends these requirements as appropriate. Furthermore, they provide an efficient and

credible system for the evaluation, accreditation, and re-accreditation of physical therapy residency and fellowship education programs.
APTA Evaluates Effectiveness of Residency and Fellowship Accreditton-2016-2017

In 2016 the APTA initiated an external audit of the ABPTRFE by hiring a consultant to:

- conduct an audit of ABPTRFE policies, procedures, and standards;
- provide a comparison of ABPTRFE accreditation processes and standards to industry standards;
- provide recommendations related to the benefits and risks in seeking and securing outside recognition of its residency/fellowship accreditation program (i.e., United States Department of Education [USDE]; Council for Higher Education Accreditation [CHEA]); and
- provide recommendations for an accreditation process that maintains the necessary rigor and provides an affordable business model based upon these potential paradigms:
    1) current levels of program growth,
    2) growth based on residency being required for specialty certification,
    3) anticipated growth for required residency as a part of standard professional development – annual graduation rate of 10,000 entry level professionals.

ABPTRFE's consultant presented the proposed quality standards during a forum at CSM 2017. The consultant presented the audit process and findings along with an industry analysis, findings from program director interviews, survey results and observations from onsite visits.

The process for developing the proposed Quality Standards was reviewed with the emphasis on streamlining content to eliminated confusion, reduce redundancy and provide clear language. A framework of the new Quality Standards in comparison to the former Evaluative
Criteria was presented in terms of criteria and key elements with encouragement to review the new standards closely and compare them to the previous standards and provide comment.

AAOMPT Responds to Consultant Report & Changes at ABPTRFE

The AAOMPT Program Director's Special Interest Group collectively submitted a single response from approximately 26 fellowship programs during the public comment period. ABPTRFE made final modifications to the standards and adopted the Quality Standards for Clinical Physical Therapist Residency and Fellowship Programs on June 21, 2017. ABPTRFE announced these standards to the public on June 30, 2017. During this notification, programs were informed that any program currently accredited, or those who applied for accreditation on or before December 31, 2017, would need to comply with the new quality standards by January 1, 2019.

ABPTRFE indicated that in the fall of 2016, discussion occurred with the President of the AAOMPT, Jim Rivard. This was before ABPTRFE finalized the proposed quality standards and launched its public comment period. Recommendations were set forth at that time to create one set of standards for all residency and fellowship programs. At that time, ABPTRFE's decision was to restore their accreditation criteria to the 2013 version removing evaluative criteria and specific mentor qualifications (130 hours of direct monitoring). At that time, the AAOMPT President was not aware that a Fellow of AAOMPT would not be a requirement for mentorship in OMPT programs. It was agreed upon that AAOMPT would be responsible for the oversight of program compliance with additional standards required by IFOMPT for those OMPT fellowship programs seeking AAOMPT recognition.

Significant Change in APTA-AAOMPT MOU

A new MOU dated and signed in June of 2017, but not effective until January of 2018, stated that ABPTRFE has the authority to prescribe and amend the requirements a program must meet in order to be accredited. It further outlines the goals and objectives of the MOU. This includes the 2018 redefinition of the relationship between ABPTRFE and the Academy, including the removal of the statement that "the APTA Board will make a good faith effort to ensure that the credentialing process satisfies the IFOMPT Standards," along with the statement that "if the Academy requests, the Board will require OMPT programs to undergo review by an "External Assessor" (EA) in the manner prescribed by the Federation with AAOMPT being responsible for the EA Process."

This was a significant change in the responsibilities of both organizations. Based on this MOU, ABPTRFE/APTA is no longer beholden to the first agreement in 2001 when it was decided that the APTA would take over responsibility of credentialing, now accrediting clinical OMPT fellowship programs. The APTA accepted the core components from the "AAOMPT Standards for Orthopaedic Manual Physical Therapy Residency Training" as critical elements that must be in place for a program to be credentialed (i.e., supervised clinical hours and examinations including practical examinations). In essence, the 2018 MOU relinquished all requirements of ABPTRFE to meet the earliest standards developed by AAOMPT or the newly adopted IFOMPT Standards.

2018: A new MOU for APTA & AAOMPT

The 2018 MOU permits AAOMPT to recognize ABPTRFE-accredited programs only if they satisfy AAOMPT-imposed requirements that exist in addition to those imposed by the (ABPTRFE) Board. It also gives AAOMPT the authority to implement program requirements beyond the ABPTRFE requirements in order for the program to qualify for recognition by the Academy (AAOMPT), including, without limitation, requirements based on the IFOMPT's Educational Standards. The Academy is now solely responsible for determining such additional requirements and

for administering the application of such requirements to programs seeking AAOMPT recognition.

AAOMPT Appeal of ABPTRFE Standards

In January 2018, the APTA President, Sharon Dunn, AAOMPT President, Elaine Lonnemann and APTA Executive Vice President, Professional Affairs met at the Graham Sessions and discussed the current Memorandum of Understanding and the concerns of AAOMPT. Later that month AAOMPT President Elaine Lonnemann had a meeting with ABPTRFE Staff member Kendra Harrington. AAOMPT presented concerns about the potential unintended consequences that could occur if a program chose to "not" meet IFOMPT Standards. One concern would be that the US could have graduates of ABPTRFE accredited Fellowship Programs who would then be fellowship trained and therefore fellows of OMPT but, would not meet IFOMPT requirements. AAOMPT asked ABPTRFE to consider re-opening the window for comment on the standards since the programs had collectively been represented by one voice in the open period. It was stated that the process for re-evaluating the standards was closed for five years and that the process for objection was to send ABPTRFE concerns/complaints by letter.

In the next month, over 75 letters from stakeholders including AAOMPT fellows, program directors, fellows in training, the AAOMPT Board and the IFOMPT were submitted to ABPTRFE expressing concern. In response to this, on March 13, 2018, the ABPTFE voted to extend the date for compliance with the Quality Standards for OMPT education to January 1, 2020 but only for those programs that held accreditation candidacy status prior to December 31, 2017. This significantly helped many programs that did not have the entry requirement of Orthopaedic Specialty Certification (OCS) or ABPTRFE residency training as a pre-requisite. This decision did not respond to the concern that the potential for two standards were being developed for OMPT fellows in the US. Communication with the APTA and the ABPTRFE reiterated the commitment to work with the AAOMPT to promote the AAOMPT recognized Fellow as the higher standard.

2018 House of Delegates Motion & the APTA-AAOMPT Relationship

In June 2018, with permission, the APTA President Sharon Dunn posted a letter on the APTA HUB from the AAOMPT regarding a statement of support for RC 41-18 at the APTA House of Delegates. The letter indicated that the AAOMPT Board passed the following motion:

The AAOMPT supports RC 41-18 put forward by the APTA Board of Directors (BOD) to the 2018 House of Delegates (HOD) to recognize the American Board of Physical Therapy Residency and Fellowship Education (ABPTRFE) as the agency for the accreditation of physical therapy residency and fellowship education programs. We support the forthcoming proposed changes to the policies and procedures mentioned in the post on the APTA HUB by the Chair of ABPTRFE on February 22.

2018. We support recommendations to create additional diversity through the addition of a public member and that ABPTRFE be comprised of broad representation from the residency and fellowship program community. We also support the development of a formal standards review committee (monitoring committee) independent of ABPTRFE and implementation of similar operational rules and procedures as CAPTE with recognition and accountability to the APTA BOD and US Department of Education (USDE).

Several AAOMPT members who were chapter delegates as well as Elaine Lonnemann were invited to speak to the motion. Lonnemann explained that with the adoption of the 2018 Standards ABPTRFE would no longer accept the IFOMPT educational standards as the standard for review as they had with the 2015 Standards. As a result, ABPTRFE created the potential for having two tiers of OMPT fellows in the US. In addition, the OMPT fellowship programs would have to go through two reviews creating a financial and time burden on the programs. It was noted that this created the potential for a program that chooses not to undergo the second (AAOMPT) process, to be able to develop a fellowship program at a lower cost and with fewer needed resources i.e., Fellows as mentors that would compete with the AAOMPT programs. Lonnemann iterated that AAOMPT brought 20 OMPT programs to APTA in our original agreement which at that time was mutually beneficial. The differences in the ABPTRFE Standards and IFOMPT Standards would require AAOMPT to review programs more extensively. The differences were outlined: 1) the mentor must be a fellow of AAOMPT, 2) variations in the didactic and practical curriculum hours and 3) a research/critical appraisal requirement. It was noted that "While AAOMPT is not happy that ABPTRFE has voted to drop the higher international standards of IFOMPT in Fellowship review by ABPTRFE facilitating a situation in which there will be two standards for OMPT fellows in the US, we believe that the APTA Board, in support of AAOMPT will continue discussions with ABPTRFE regarding this process." The motion was called to a vote and RC-18 motion was passed by the APTA House of Delegates.

AAOMPT & APTA Division Grows on Standards for OMPT Fellowship 2016-2018

In response to this, the APTA Board indicated that the APTA is not able to advocate on AAOMPT's behalf for ABPTRFE to reverse recent Standards decisions, as this would be counter to:

- guidelines for operation of ABPTRFE (GUIDELINES: AMERICAN BOARD OF PHYSICAL THERAPY RESIDENCY AND FELLOWSHIP EDUCATION BOD G09-15-02-04), and

- APTA Board decisions in 2016 that directed the recent ABPTRFE activities toward standardizing residency and fellowship accreditation.

APTA stated they would work with AAOMPT to promote the additional IFOMPT/AAOMPT credential and its history and commitment to excellence, as discussed by the APTA board on RC-41-08 and in matters consistent with the ABPTRFE response to AAOMPT on 5/29/18 and in the current MOU between APTA and AAOMPT.

In June 2018, ABPTRFE published new policies and processes based on recommendations from the external consultant. In July 2018, ABPTRFE put out a call for 6 to 8 individuals to serve on its new Standards Committee. The committee was developed and is responsible for annually reviewing suggestions received by internal and external stakeholders on the adequacy of the implemented policies, procedures, and standards (ABPTRFE Appendix 4.0). The Standards Committee will submit proposed revisions to ABPTRFE for consideration during the ABPTRFE systematic review of its Quality Standards at regular 5-year intervals (ABPTRFE Policy 15.00). Two AAOMPT Fellows were appointed to this committee and were Gail Deyle and Sara Cristello.

In August 2018, an appeal letter was sent to Dr. Linda Csiza (ABPTRFE Chair) in response to ABPTFE denying our request to modify the Evaluative Criteria to include the requirements within the AAOMPT DASP. The DASP includes the IFOMPT Standards as outcomes for the Foundational Knowledge Underlying Orthopaedic Manual Physical Therapy Practice and these requirements are dispersed throughout the curricular content. The letter requested that the ABPTRFE reconsider the decision to disapprove our request to edit Section 2.2.3 of the Accreditation Report Rubric for Fellowship Program Hours to include IFOMPT standards for all OMPT programs.

The request was in response to their letter (May 2018) that stated, “Making changes in the rubric would jeopardize the accreditation process by establishing a second set of standards that were not formally adopted by ABPTRFE in 2017”.

In 2017, the ABPTRFE rules specified that the review for standard setting occurs once every five years. However, in the ABPTRFE rules at the time our request was made, Section 2.3c “Modification of Particular Criteria” indicated “ABPTRFE may make modifications of particular criteria that are not minor only after it notifies the stakeholders identified in Rule 2.4 of the proposed modification, gives interested parties a reasonable opportunity to comment during a period lasting at least thirty days, and considers any comments submitted.” Dr. Burlis (immediate past ABPTRE Chair) eluded to this modification criteria as well in her clarification statement on the HOD HUB in February 2018.

AAOMPT asked ABPTRFE to reconsider the decision since the rules signify there is a process for making these revisions should it be deemed appropriate. As such, it would not jeopardize the accreditation process but would demonstrate response to stakeholder concerns.

In respect to their desire for accreditation by the Council of Higher Education Accreditation (CHEA) or the Department of US Education (DOE) (Dr. Burlis

statement HOD HUB), it was our understanding that having two standards would not affect ABPTRFE negatively.

ABPTRE's response to this request indicated that "adoption or enforcement of external organizations' standards would run contrary to the intent of ABPTRFE's recent standards review to streamline the accreditation process. Any program, including fellowship programs in Orthopaedic Manual Physical Therapy (OMPT), can exceed the minimum ABPTRFE standards."

The concern about having a second tier of OMPT fellowship trained individuals was refuted because "in the last five years, not one OMPT program has decided to develop and accredit using ABPTRFE's minimum fellowship accreditation standards. Every OMPT program has met the additional requirements set forth by AAOMPT (Csiza letter 2018)" and sought AAOMPT recognition. AAOMPT was very concerned that ABPTRFE was not listening because the Standards during those five years were very similar to the IFOMPT Educational Standards and did not require an extensive review by AAOMPT. With the adoption of the 2018 Standards, AAOMPT would need to go beyond recognition but to move toward accreditation procedures.

Dr. Csiza reported that "ABPTRFE's published processes and procedures provides programs and stakeholders an opportunity to submit recommendations for changes to the Quality Standards to the Standards Committee who are tasked with reviewing recommendations for revision." "These Committee endorsed recommendations are then submitted to ABPTRFE for review and included within the public comment period during the next evaluation cycle. ABPTRFE undertakes a structured review of its Quality Standards every five years with the next scheduled review to begin in 2021. If new, additional, or revised standards are required, ABPTRFE follows its published procedures to ensure consistent application of policies and Quality Standards for all programs as required if seeking either CHEA or United States Department of Education recognition."

In December 2018 several of the AAOMPT Fellowship Programs with multiple sites voiced concern about a change in the policies and procedures published in June. They were specifically concerned about the 13.4.2 Substantive Change Implementation which required the program to have an on-site visit if they increased the number of mentoring sites by three or more. Program Directors with multiple sites were concerned about the requirement to submit information for not only, the sites where one on one mentoring would occur, but also where any of the fellow's in training clinical practice hours would occur.

Program Directors and key stakeholder submitted letters of concern with at least ninety-three letters being cc'd to AAOMPT. In response to these letters of concern, in February of 2018 ABPTRFE temporarily suspended the onsite visit requirement in ABPTRFE Processes and Procedures 13.4 "Change in Curriculum," with regard to a program increasing the number (3 or more) of participant practice sites in one calendar year. The requirement was to be discussed further with stakeholders and the ABPTRFE Standards Committee. APTA/ABPTRFE scheduled a stakeholder's forum to discuss the ABPTRFE policy 13.4.2 specific to a program increasing the number (3

or more) of participant practice sites within 1 calendar year and the onsite visit requirement.

In addition to the site visit policy change, another concern of AAOMPT was that a fellow in training could potentially disengage from a program after meeting the minimum standards of OMPT presented by ABPTRFE. Harrington noted that if ABPTRFE grants the program accreditation, then all graduates are graduates of an accredited program. Whatever the program outlines as its curriculum at the time they seek accreditation, or renewal of accreditation, is what every participant must receive to graduate (correspondence with K. Harrington). If the program wants to depart from this curriculum, it can only do so following ABPTRFE's substantive change processes which required prior approval of the board. This reduced concerns that a student could be admitted to an AAOMPT program with the intention of meeting AAOMPTs requirement but could choose to disengage after the minimum requirements and would still be considered a graduate of the program, however they would not be recognized by AAOMPT.

On April 29, 2019 APTA/ABPTRFE held a stakeholder forum with representatives of APTA, ABPTRFE, and large multi-site residency and fellowship programs impacted by the new site visit requirements. The primary objectives of the discussion were: (1) review the ABPTRFE standards-setting process, and (2) identify challenges and opportunities associated with establishing and sustaining large multisite programs. ABPTRFE solicited constructive feedback from stakeholders to ensure that ABPTRFE continues to meet its charge to appropriately evaluate, accredit, and re-accredit residency and fellowship programs while also assisting programs in maintaining consistency and quality among all clinical and didactic sites.

From this stakeholder forum, ABPTRFE's Standards Committee reviewed all feedback generated during the forum and then forwarded recommendations to the Board for consideration at its May meeting. They recommended improving the standardization of mentors across all programs with the development of a process for mentor credentialing, including a skills-assessment component, to ensure quality mentor skills. If a mentor credentialing process is established, the committee noted that a site visit may not be required if the mentors at the newly added practice sites hold this certification.

The Standards Committee disagreed with the recommendation to perform random onsite visits for practice sites being added in lieu of current language in 13.4 but did recommend that ABPTRFE develop thresholds, or a rubric, that indicates when a site visit is required.
The ABPTRFE agreed with the recommendations and initiated subgroups to work on these processes.

Kim Wilcox Curbow (ABPTRFE Chair) responded to the AAOMPT letter sent in May that outlined the concerns of AAOMPT related to site visits for additional sites (13.4.2), admission criteria for fellowship programs, using IFOMPT Standards as a second set of standards, and required mentoring by FAAOMPTs. She indicated that

the site visit requirement for programs increasing three or more sites will remain suspended until further discussion in September 2019.

It was noted that the Admissions Criteria will remain unchanged based on the unanimous decision of the Standards Committee that fellowship admission criteria should remain unchanged from the current Standard that requires either graduation from an ABPTRFE accredited residency program or specialty certification through ABPTS.

The ABPTRFE Standards committee will discuss the use of IFOMPT Standards as a second set of standards for fellowship programs in orthopaedic manual physical therapy in their March 2020 annual meeting, and the standards that are currently in place will be re-reviewed in 2023 (this was different than the communication received earlier from Dr. Csiza indicating the 2021 review of Standards). ABPTRFE indicated that the Standards for the fellow as a requirement would not be implemented nor would there be any changes in entry criteria.

2019-2020: AAOMPT Resumes Credentialing OMPT Programs

The AAOMPT Board discussed AAOMPTs continued role in accrediting programs for recognition within AAOMPT using IFOMPT Standards. AAOMPT's External Assessor process to meet the International Monitoring requirements would require more oversight by P&N Association Management with the need to go beyond ABPTRFE's review of their minimum standard. After evaluating the report from the Task Force to assess the feasibility of AAOMPT performing credentialing independently of the APTA. The AAOMPT Board believes a single accreditation agency for all physical therapy residency and fellowship programs is best option, however, based on unresolved differences with the APTA it is clear that for OMPT fellowship a pathway separate from the ABPTRFE process will be necessary in 2020.

The accreditation process provided by AAOMPT will involve two pathways. AAOMPT will encourage fellowship programs to complete both the ABPTRFE accreditation and AAOMPT processes, however, OMPT fellowship programs may choose to leave ABPTRFE, AAOMPT is providing an opportunity to stay within AAOMPT and the international manual therapy community. ABPTRFE has assured AAOMPT that every program who chooses to be recognized by AAOMPT after the ABPTRFE process would have a content expert reviewing the self-evaluation report at the candidacy level (a Candidacy Review Council member) as well as on the onsite team. For OMPT programs, that content expert is a Fellow of AAOMPT.

The AAOMPT fellowship accreditation process will be developed by P&N within the newly formed 501c3 Foundation for Orthopaedic Manual Physical Therapy. The Foundation for OMPT is a 501c3 and was incorporated in 2019. The Foundation for OMPT was established to facilitate scientific, educational and charitable initiatives that further the health of the public, as well as the knowledge and integrity of the profession of orthopaedic manual physical therapy and to educate the public on the health benefits of manual physical therapy; and provide accreditation of AAOMPT

Fellowship Programs for the credential of FAAOMPT. A survey of the AAOMPT fellowship programs revealed that twelve of the thirty-two programs intend to undergo accreditation only by AAOMPT. Seventeen of the programs will remain with the process whereby ABPTRFE accredits the minimum Fellowship standard followed by accreditation by AAOMPT to meet IFOMPT standards.

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