

# AMERICAN ACADEMY OF ORTHOPAEDIC MANUAL PHYSICAL THERAPISTS

## EDUCATIONAL STANDARDS IN ORTHOPAEDIC MANUAL PHYSICAL THERAPY 2011

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## **I. Introduction**

Orthopaedic Manual Physical Therapy (OMPT) is a specialized area of physical therapy practice utilized in the management of musculoskeletal conditions and based on clinical reasoning and the use of highly specific manual techniques and therapeutic exercises. It encompasses, and is driven by, the available scientific and clinical evidence and the biopsychosocial framework of each individual patient (2008 IFOMPT Standards Document). The American Academy of Orthopaedic Manual Physical Therapists (AAOMPT)\* was created for the promotion of expertise in physical therapy patient care by supporting excellence in orthopaedic manual physical therapy practice, education and research. A description of expertise-based orthopaedic physical therapy practice that emphasizes sound clinical decision-making and patient-centered care can guide the development of a physical therapist practicing in a musculoskeletal setting (Milidonis et al, 1996, 1999).

The AAOMPT established its first standards document in 1993 with a revision of the document completed and accepted in 1999. Since its acceptance as a full voting member organization of the International Federation of Orthopaedic Manipulative Physical Therapists (IFOMPT) in 1992, the AAOMPT continues to move forward not only in terms of increased membership and greater numbers of credentialed fellowship programs, but also in its vision and scope of influence.

In light of the American Physical Therapy Association's (APTA) Vision 2020, the move in healthcare education towards competency-based standards (Carraccio et al, 2002), and the increasing number of OMPT fellowship educational programs available to the practicing clinician, the AAOMPT has chosen to revise this, its own standards document, to now emphasize student-centered, competency-based education. A competency has been defined as a complex set of behaviors built on the components of knowledge, skills, attitudes, and proficiency (Carraccio et al, 2002). Inherent to this mode of curriculum is the emphasis on progressive development of skills in clinical decision making, active versus passive learning, and formative feedback to fellows as they progress through the spectrum of competence. This translates into a patient-centered, multi-dimensional process that evolves in response to retrospective patient

analysis (Jensen et al, 2000; Resnik and Jensen, 2003). Ultimately, the goal of OMPT fellowship training is the promotion of ethical and reflective clinical practice (Wainwright et al 2010). Modeled in the format of the IFOMPT educational standards as found in Part A of IFOMPT's 2008 document, "Educational Standards in Orthopaedic Manipulative Physical Therapy," this document corresponds to both the IFOMPT standards and the AAOMPT's 2008 "Description of Advanced Specialty Practice (DASP)."

The APTA credentialing guidelines serve as a basis for all post-professional physical therapy specialty training in the US, with additional requirements mandated for OMPT fellowships. The APTA credentialing guidelines, this document, and the DASP serve as a guide for the development of fellowship training programs. The DASP outlines the dimensions of advanced clinical practice of orthopaedic manual physical therapy and presents recommendations for professional development of advanced practitioners. This standards document provides educational competencies to be addressed within fellowship training programs. These documents provide all parties involved in the fellowship educational process the needed criteria for program execution and completion, as well a framework for measuring fellows' progress and success. These AAOMPT standards cover theoretical, practical and clinical knowledge as applied to orthopaedic manual physical therapist patients/clients, thereby elucidating minimum fellowship education requirements espoused by the AAOMPT. The AAOMPT recognizes that OMPT fellowship programs may vary in their educational strengths and emphases. At the same time the AAOMPT is dedicated to providing a viable and usable frame of reference for educational programs. The AAOMPT is committed to evidence - based practice and research, and thus strongly supports these activities within its educational programs. Finally, this document provides structural guidelines by which areas of study and minimal didactic and practical hours are outlined. The acceptance and implementation of the educational standards, both theoretical and practical, are requirements for educational programs wishing to be credentialed by the APTA and recognized by the AAOMPT.

## II. The Scope of Orthopaedic Manual Physical Therapy Practice

The orthopaedic manual physical therapist provides advanced knowledge of comprehensive conservative management characterized by the analysis, interpretation and treatment of health problems resulting from musculoskeletal disorders.

In order to meet the competencies of an orthopaedic manual physical therapist, advanced knowledge, skills and attributes are required using the principles of evidence-based practice and the processes of clinical reasoning. The working of the orthopaedic manual physical therapist can be described in ten clinical roles, with key areas of competencies linked to the roles:

- 1) The orthopaedic manual physical therapist as an advanced clinical decision-maker
- 2) The orthopaedic manual physical therapist as a diagnostician
- 3) The orthopaedic manual physical therapist as a communicator
- 4) The orthopaedic manual physical therapist as a educator/mentor
- 5) The orthopaedic manual physical therapist as a collaborator
- 6) The orthopaedic manual physical therapist as a manager
- 7) The orthopaedic manual physical therapist as a health advocate
- 8) The orthopaedic manual physical therapist as a scholar
- 9) The orthopaedic manual physical therapist as an autonomous professional
- 10) The orthopaedic manual physical therapist as a healthcare leader

### 1. The Orthopaedic Manual Physical Therapist as an Advanced Clinical Decision-Maker

The orthopaedic manual physical therapist systematically collects quantitative and qualitative information relevant to the orthopaedic manual physical therapy patient/client's health problems and needs. Through expert clinical reasoning, an evidence-based plan of care is formulated. This role draws on the competencies required for the roles of diagnostician, communicator, educator/mentor, collaborator, manager, health advocate, scholar, professional and leader.

### 2. The Orthopaedic Manual Physical Therapist as a Diagnostician

The orthopaedic manual physical therapist serves both as primary healthcare provider and consultant for physical therapy patient/clients. Both roles require skillful interview and examination, problem-solving, differential diagnosis and prognostic reasoning. In addition, the orthopaedic manual physical therapist screens for conditions outside his/her scope of practice using evidence-based strategies and ensures referral to the appropriate healthcare provider.

### 3. The Orthopaedic Manual Physical Therapist as a Communicator

The orthopaedic manual physical therapist demonstrates advanced verbal and non-verbal communication skills which are required for accurate screening and diagnosis, and for selecting effective intervention strategies. Through use of expert communication skills, the orthopaedic manual physical therapist builds effective partnerships and establishes rapport with physical therapy patient/clients, care givers, healthcare professionals, and with individuals, groups, communities and the general population. These abilities are critical to: (a) developing collaborative relationships; (b) empowering individuals/target groups to make informed decisions about their health; and (c) eliciting patients'/target groups' needs, beliefs and expectations about their health.

### 4. The Orthopaedic Manual Physical Therapist as an Educator/Mentor

The orthopaedic manual physical therapist serves as an educator of physical therapists, both at the professional and post-professional level, in addition to the role of educating patient/clients, the public and other health care providers. In turn, by serving as a mentor to colleagues, the orthopaedic manual physical therapist aids in elevating the level of practice and the physical therapy profession as a whole.

### 5. The Orthopaedic Manual Physical Therapist as a Collaborator

The orthopaedic manual physical therapist works collaboratively with patient/clients and with other healthcare providers, family members, communities or populations. It is therefore essential for the orthopaedic manual physical therapist to build sustainable and equitable relationships with patient/clients and multi-disciplinary teams to facilitate the attainment of meaningful outcomes.

### 6. The Orthopaedic Manual Physical Therapist a Manager

The orthopaedic manual physical therapist makes ethical practice decisions involving resources, co-workers, tasks, policies and practice settings. This is done in multiple settings within the broad context of the healthcare system. The orthopaedic manual physical therapist is required to ethically and effectively prioritize and execute tasks through teamwork with colleagues, make systematic, patient/client-based decisions when allocating finite healthcare resources, and regularly make ethical decisions regarding personal conduct, leadership style, and lifestyle balance.

### 7. The Orthopaedic Manual Physical Therapist as a Health Advocate

The orthopaedic manual physical therapist is an advocate in response to the challenges represented by those social, environmental, and biological factors that determine the health of patients and society. The orthopaedic manual physical therapist understands the importance of developing policies and initiatives to promote wellness and prevent health dysfunction at the individual, community and national levels.

## 8. The Orthopaedic Manual Physical Therapist as a Scholar

The orthopaedic manual physical therapist engages in lifelong pursuit of professional expertise and recognizes the need to be continually learning and to model this attribute for others. Through scholarly activities, the orthopaedic manual physical therapist contributes to the appraisal, collection, and sharing of relevant health care and scientific knowledge to facilitate the education of his/her patient/clients, students, colleagues and others.

## 9. The Orthopaedic Manual Physical Therapist as an Autonomous Professional

The orthopaedic manual physical therapist has a societal role as a professional with a distinct body of knowledge, skills and attributes dedicated to improving the health and well-being of others. The orthopaedic manual physical therapist is committed to the highest standards of excellence in clinical care and ethical conduct. Continued personal and professional development leads to better clinical outcomes and promotion of evidence-based and ethical physical therapy practice.

## 10. The Orthopaedic Manual Physical Therapist as a Healthcare Leader

The orthopaedic manual physical therapist serves as a healthcare leader across a spectrum of professional settings within the healthcare arena.

## A COMPETENCY FRAMEWORK FOR OMPT

### A. Purpose

The purpose of a competency-based framework of educational standards is the promotion of an active, student-based learning process. The document provides an outline of major content areas of learning to be addressed during OMPT fellowship training. Each competency represents a behavior that, once accomplished, can be safely incorporated into the fellow's clinical practice. It is expected that a continued refinement of these competencies will occur over time, as the graduate progresses toward expertise.

### B. Components

#### Dimensions

The dimensions are the major functions for performance at the level of a fellow in OMPT. The dimensions reflect the definition and scope of OMPT practice.

#### Competencies

The competencies are the components of each dimension written as performance outcomes. Overall, the competencies within each dimension reflect the standardized requirements for performance at the level of a fellow in OMPT.

Competencies are organized into clinical domain areas of knowledge (K), skills (S) attributes (A). The following competencies were formulated through a process which compared the existing AAOMPT educational standards document (1999), the AAOMPT DASP for OMPT (2008), the IFOMPT educational standards document (2008), and the present APTA requirements for OMPT fellowship program development. When applicable, each competency is referenced to either the DASP or the IFOMPT document.

The competency framework details the following components:

Knowledge (K) encompasses the theoretical and practical understanding, use of evidence, principles, and procedures.

Skills (S) encompass cognitive and psychomotor skills relative to OMPT.

Attributes (A) encompass personal qualities, characteristics and behavior in relation to the environment.

### C. Dimensions

Dimension 1. Demonstration of knowledge of evidence-based practice

Dimension 2. Demonstration of knowledge of biomedical sciences



- Dimension 3. Demonstration of knowledge of clinical sciences
- Dimension 4. Demonstration of knowledge of behavioral sciences
- Dimension 5. Demonstration of advanced OMPT skills
- Dimension 6. Demonstration of an advanced level of clinical reasoning skills
- Dimension 7. Demonstration of an advanced level of communication skills
- Dimension 8. Demonstration of an advanced level of practical skills
- Dimension 9. Demonstration of an understanding of the role of clinical research in advancing and defining OMPT practice
- Dimension 10. Demonstration of clinical expertise and continued professional commitment to the development of OMPT practice

## **Dimension 1 Demonstration of Knowledge of Evidence-Based Practice**

D1K1. Demonstrate knowledge of how to successfully integrate evidence-based practices into clinical practice. (DASP Ch2:II; Ch4:III,IV,V; Ch5:VI; Ch6:A,B,C,D; IFOMPT D1.K1)

D1K2. Demonstrate knowledge of how to successfully integrate evidence-based practices into instruction of students, patient/clients, colleagues and the broader health care community. (DASP Ch4:III,IV)

D1S1. Demonstrate the ability to integrate clinical expertise, best evidence and patient preferences into clinical practice.

D1S2. Demonstrate the ability to perform highly effective literature searches to retrieve the body of research evidence relative to OMPT practice. (DASP Ch4:3A; Ch5:,VI; Ch6: C,D; IFOMPT D1.S1)

D1S3. Demonstrate the ability to critically review the research evidence to determine the validity of the research. (DASP Ch6:A8; Ch6:C4; Ch6:D4)

D1S4. Demonstrate the ability to determine the level of evidence represented by the research. (DASP Ch6:D1)

D1S5. Demonstrate the ability to evaluate competing research evidence to find best evidence for a given clinical situation. (DASP Ch6:C1-5)

D1S6. Demonstrate the ability to align research evidence with the goals and expectations of the patient/client for successful evidence-based patient/client management.

D1S7. Demonstrate the ability to retrieve appropriate detail from published research evidence in order to apply best evidence in fellowship teaching and clinical practice. (DASP Ch6:C5)

D1S8. Demonstrate the ability to teach and mentor students and other physical therapists in the use of evidence-based practices. (DASP Ch4:4B)

D1S9. Demonstrate the ability to find and integrate best research evidence for patient/client interventions. (DASP Ch4:3A; IFOMPT D1.S1)

D1S10. Demonstrate the ability to find and integrate best research evidence for diagnosis and screening. (DASP Ch2:II)

D1S11. Demonstrate the ability to find and integrate best research evidence for valid and reliable tests and measures. (DASP Ch6:A8,C4)

D1S12. Demonstrate the ability to find and integrate best research evidence for valid and responsive outcome measures. (DASP Ch4:2B; IFOMPT D1.S5)

D1S13. Demonstrate the ability to find and communicate best research evidence for accurately determining the patient/client prognosis. (DASP Ch2:II)

D1S14. Demonstrate the ability to find and communicate best research evidence for patient/client harm, as well as the precautions and contraindications related to OMPT interventions. (DASP Ch2:IE2e)

D1S15. Demonstrate the ability to retrieve, integrate and apply knowledge and best evidence from the clinical, medical and behavioral sciences.

## **Dimension 2 Demonstration of Knowledge of Biomedical Sciences**

D2K1. Demonstrate advanced clinical knowledge of anatomy for effective OMPT patient/client management. (DASP Ch2:IA,IB8,IE2,IIA1; Ch5:IA; IFOMPT D2.K1)

D2K2. Demonstrate advanced clinical knowledge of physiology for effective OMPT patient/client management. (DASP Ch2:IA1-2,D7b,f(1),IIIB1,VIA1; IFOMPT D2.K2)

D2K3. Demonstrate advanced clinical knowledge of tissue properties for effective OMPT patient/client management. (DASP Ch2:ID7c-e,IIIB3; Ch5:IB,IID; IFOMPT D2.K3)

D2K4. Demonstrate advanced clinical knowledge of biology/pathobiology and biomechanics/pathomechanics for effective management of the OMPT patient/client. (DASP Ch2:VA1,VIA1; Ch5:I,II; IFOMPT D2.K4)

D2K5. Demonstrate advanced clinical knowledge and critical analysis of non-mechanical impairment within the musculoskeletal system, for effective patient management. (DASP Ch2:IA1b,IB2,ID7i,VIA2; Ch5:IIA-C; IFOMPT D2.K5)

D2K6. Demonstrate advanced clinical knowledge of neurological impairment for effective OMPT patient/client management. (DASP Ch2:ID6,ID7f-I; Ch5:IIA-C; IFOMPT D2.K6)

D2K7. Demonstrate advanced clinical knowledge to effectively screen for visceral impairment in the OMPT patient/client. (DASP Ch2:IA2,IB2,IB9,IC1,IC4,ID5,IE3,VF1; Ch5:IIA-C; IFOMPT D2.K7)

D2K8. Demonstrate advanced clinical knowledge to effectively screen for cardiovascular impairment in the OMPT patient/client. (DASP Ch2:IA1,IB2,IB9,ID5,IE3,VF1; Ch5:IIA-C; IFOMPT D2.K8)

D2K9. Demonstrate advanced clinical knowledge to effectively screen for pulmonary impairment in the OMPT patient/client.

D2K10. Demonstrate advanced clinical knowledge to effectively screen for genitourinary impairment in the OMPT patient/client.

D2K11. Demonstrate advanced clinical knowledge to effectively screen for endocrine impairment in the OMPT patient/client.

D2K12. Demonstrate advanced clinical knowledge to effectively screen for integumentary impairment in the OMPT patient/client.

D2K13. Demonstrate advanced clinical knowledge to effectively screen for dental and orthodontic impairment in the OMPT patient/client. (DASP Ch5:IIIE; IFOMPT D2.K9)

D2K14. Demonstrate advanced clinical knowledge of the physiology of pain and impairment so as to be able to differentiate various pain conditions as related to the OMPT patient/client. (DASP Ch2:ID7i,IIIB1; Ch5:IV,A,C; IFOMPT D2.K10)

D2K15. Demonstrate advanced clinical knowledge of valid and reliable examination procedures that facilitate accurate differential diagnosis for the OMPT patient/client. (DASP Ch2:IA-E; IFOMPT D2.K11)

D2K16. Demonstrate advanced clinical knowledge of the role of pharmacotherapeutic agents including effects and side-effects of commonly used agents for treating the OMPT patient/client. (DASP Ch2:IA1,IIC2,ID7i; Ch5:IIIG; IFOMPT D2.K12)

D2K17. Demonstrate advanced clinical knowledge of the role and implications of surgical strategies used for treating OMPT patient/clients. (DASP Ch2:IA1; Ch5:IIIF; IFOMPT D2.K13)

D2K18. Demonstrate advanced clinical knowledge and critical analysis of the indications, contra-indications, outcomes and side effects of biopsychosocial and pain interventional strategies used for treating patients with pain.

D2A1. Demonstrate reflective practice in the application of knowledge of biomedical sciences in the management of the OMPT patient/client. (IFOMPT D2.A2)

### **Dimension 3 Demonstration of Knowledge of Clinical Sciences**

D3K1. Demonstrate applied knowledge of biomedical sciences in OMPT patient/client management. (DASP Ch2:IA1a-c,e,Ij2a-f,3hB1-2,8,IE2c; Ch5:IA-B,II:V:A1; IFOMPT D3.K1)

D3K2. Demonstrate applied knowledge of the biomedical science rationale for examination of the OMPT patient/client. (DASP Ch2:IB8,IC3,ID4-5,IE,IIA; Ch5:VIA; IFOMPT D3.K3)

D3K3. Demonstrate applied knowledge of the biomedical science rationale behind OMPT interventions. (DASP Ch2:II C1-3,D,IIIA-C,VA-E,VI A; Ch5:VA1; IFOMPT D3.K2)

D3K4. Demonstrate applied knowledge of the biomedical rationale for prognostic factors relevant to OMPT patient/client management. (DASP Ch2:II B-C; Ch5:VA1; IFOMPT D3.K4)

D3S1. Demonstrate the ability to consider biomedical aspects of the OMPT patient/client's health condition in relation to the individual's clinical presentation and functional abilities. (DASP Ch2:IA1-3,IB1-7,ID7,II B1c-g,IV B1b,4d,f2; IFOMPT D3.S1)

D3S2. Demonstrate the ability to consider biomedical aspects of the OMPT patient/client's health condition to the choice and interpretation of examination and intervention procedures. (DASP Ch2:VA-E,VIA; IFOMPT D3.S2)

D3S3. Demonstrate the ability to relate the biomedical aspects of the OMPT patient/client's health condition to his/her prognosis. (DASP Ch2:VA-E,VIA; IFOMPT D3.S3)

D3A1. Demonstrate an objective and systematic approach in the application of knowledge of the clinical sciences. (DASP Ch2:IAc,IB1-2,8-9,IC2-3,ID7a-c,i-j,IE3,IIDd,VB; IFOMPT D3.A1)

## **Dimension 4 Demonstration of Knowledge of Behavioral Sciences**

D4K1. Demonstrate advanced clinical knowledge of behavioral science, pain behavior, and behavioral change relevant to OMPT patient/client management. (DASP Ch5:IVA-D, VIIB; IFOMPT D4.K1)

D4K2. Demonstrate advanced clinical knowledge of subjective examination cues which may indicate a behavioral component to the OMPT patient/client. (DASP Ch2:IA1h,1i4,2e1,3j, ,6,IB8g,IB9b,ID7a8; IFOMPT D4.K3)

D4K3. Demonstrate advanced clinical knowledge of intervention principles based on behavioral science with OMPT patient/clients. (DASP Ch2:IIIA5,6)

D4K4. Demonstrate advanced clinical knowledge of the biopsychosocial model of health and illness in relation to the role of OMPT and other healthcare providers for patient/client management. (DASP Ch5:IVA-D; IFOMPT D4.K4)

D4K5. Demonstrate advanced clinical knowledge of the influence of the physical therapist's behavior and communication on the OMPT patient/client's behavior and attitudes. (DASP Ch2:IVA4,5,6a,b; IFOMPT D4.K5)

D4K6: Demonstrate the effective application of behavioral-related outcome questionnaire tools in the OMPT patient/clients.

D4S1. Demonstrate effective application of appropriate examination procedures for behavioral factors and indications for their use with OMPT patient/clients. (DASP Ch2:IA1h, IA1i4,6,IB8g,IC6,ID7a8; IFOMPT D4.S1)

D4S2. Demonstrate effective interpretation of examination findings related to behavioral factors with OMPT patient/clients. (DASP Ch2:IE1c,IE2e,g)

D4S3. Demonstrate effective implementation or modification of interventions based on behavioral factors with OMPT patient/clients. (DASP Ch2:IVA4,6a,b; IFOMPT D4.S3)

D4S4. Demonstrate effective communication skills in all aspects of OMPT patient/client management. (DASP Ch2:IVA6a-b; IFOMPT D4.S2, D7.K1)

D4A1. Appreciate the importance of behavioral factors in health conditions in OMPT patient/client management. (IFOMPT D4.A1)

## **Dimension 5 Demonstration of Advanced Clinical Knowledge of Orthopaedic Manual Physical Therapy**

D5K1. Demonstrate advanced clinical knowledge of the best scientific basis and when applicable, theoretical basis for examination of the OMPT patient/client, the relevance of findings, and the determination of a diagnosis. (DASP Ch2:IA-E; IFOMPT D5.K2)

D5K2. Demonstrate advanced clinical knowledge of the relative importance of static, dynamic, and functional posture in the examination of the OMPT patient/client. (DASP Ch2:ID6a,i,7a1-5,9,7b1b,7c8,7d5,7e,7f1,3,7g1,H2; IFOMPT D5.K3)

D5K3. Demonstrate advanced clinical knowledge of articular movement and interpretation of active and passive movement testing, including:

- provocation /alleviation of symptoms (DASP Ch2:ID7b1,2,7c1-6,8g,ID7c1g,ID7c2; IFOMPT D5.K4)
- identification of abnormal physiological and/or accessory motion (DASP Ch2:IC6c3, ID7b1,2,7c1-8,7d1-5,7e1-2,7g; IFOMPT D5.K4)
- recognition of potential structure(s) affected. (DASP Ch2:IA2a; IFOMPT D5.K4)

D5K4. Demonstrate advanced clinical knowledge of the examination and evaluation of functional movement including locomotion through examination and evaluation of findings. (DASP Ch2:IA1f; IFOMPT D5.K4)

D5K5. Demonstrate advanced clinical knowledge of the function and altered function of the muscular system through examination and evaluation of findings. (DASP Ch2:ID6d,e, 71b,d,e; IFOMPT D5.K5)

D5K6. Demonstrate advanced clinical knowledge of the function and altered function of the nervous system, through examination and evaluation of findings. (DASP Ch2:ID6c4, D7c7a-c,IIIB3d; IFOMPT D5.K6)

D5K7. Demonstrate advanced clinical knowledge of the function and altered function of the vascular system, through examination and evaluation of findings. (DASP Ch2:ID6f3, B8i4a-b,5,6; IFOMPT D5.K7)

D5K8. Demonstrate advanced clinical knowledge of valid screening, examination, and evaluation for the safe practice of OMPT. (DASP Ch2:IAb1-3, D6a-I; IFOMPT D5.K8)

D5K9. Demonstrate advanced clinical knowledge of evidence-based differential diagnosis of the OMPT patient/client. (DASP Ch2:IB1,8,9,IIA; IFOMPT D5.K9)

D5K10. Demonstrate advanced clinical knowledge of the impact of relevant contributing factors on management and prognosis of the OMPT patient/client. (DASP Ch2:IIAc1-5,B,C; IFOMPT D5.K10)

D5K11. Demonstrate advanced clinical knowledge in the selection and interpretation of appropriate medical and OMPT diagnostic tests and in the integration of the data to formulate a diagnosis. (DASP Ch2:IIAc1-3,d,IIA,E1-4; IFOMPT D5.K11)



D5K12. Demonstrate advanced clinical knowledge of interventions for management of the OMPT patient/client. (DASP Ch2:IIIA-C,IV,A,B; IFOMPT D5.K12)

D5K13. Demonstrate advanced clinical knowledge of physical therapy theory of mobilization/manipulation thrust/non-thrust for the OMPT patient/client. (DASP Ch5:IVB1a,V; IFOMPT D5.K13)

D5K14. Demonstrate advanced clinical knowledge of exercise principles as they apply to therapeutic exercise for the OMPT patient/client. (DASP Ch2:IIIB6;IVB; IFOMPT D5.K14)

D5S1. Demonstrate advanced application of OMPT in the examination, treatment, and general management of the OMPT patient/client. (DASP Ch2:I-VII; IFOMPT D5.S1)

D5S2. Demonstrate advanced integration of principles of mobilization, manipulation and exercise as essential components of OMPT. (DASP Ch2:III-VII; IFOMPT D5.K12-14)

D5S3. Demonstrate advanced application of exercise principles as they apply to therapeutic exercise in the management of the OMPT patient/client. (DASP Ch2:IIIC3;IVB1b1,2,4,5; IFOMPT D5.K14)

D5S4. Demonstrate advanced application of sensorimotor control and learning principles for management of the OMPT patient/client. (DASP Ch2:IDf1-3,7,IVB1b; IFOMPT D5.K15)

D5S5. Demonstrate advanced application of individualized patient education for management of the OMPT patient/client. (DASP Ch2:IIIB1a-g;IVA,B; IFOMPT D5.K16)

D5S6. Demonstrate advanced application of other evidence-based modalities (such as taping, bracing, orthotics, electrophysical modalities, acupuncture / needling) for management of the OMPT patient/client. (DASP Ch2:IIIB1f1-2,IVB,c-f; IFOMPT D5.K17)

D5S7. Demonstrate advanced use of interpersonal and communication skills in the management of the OMPT patient/client. (DASP Ch2:IA1h,B5&6,D2&3,IV,intro 2<sup>nd</sup> para,VID; IFOMPT D5.A1)

D5A1. Demonstrate adaptability of knowledge of OMPT in the context of patient centered practice. (DASP Ch2:ID1-3; IFOMPT D5.A1)

D5A2. Demonstrate creativity and innovation in the application of knowledge of OMPT. (IFOMPT D5.A3)

## **Dimension 6 Demonstrate an Advanced Level of Clinical Reasoning Skills**

D6K1. Demonstrate advanced knowledge of diagnostic reasoning processes/models used with the OMPT patient/client including pattern recognition, hypothetico-deductive reasoning and hypothesis testing with ongoing reflection and modification. (DASP Ch2 Intro, I Intro, IB1-9, C4, D5; IFOMPT D6.K1, D6.K2)

D6K2. Demonstrate advanced knowledge of common clinical reasoning errors with interpretation or misinterpretation of clinical data. (DASP Ch2:IC4, E4; IFOMPT D6.K5)

D6S1. Demonstrate effective subjective inquiry strategies and accurate interpretation and weighting of relevant clinical cues. (DASP Ch2 Intro, I:A, B, E; IFOMPT D6.S1)

D6S2. Demonstrate advanced clinical reasoning to integrate scientific evidence, clinical data, the patient's perceptions and goals, and factors related to the clinical context in addition to the patient's individual needs and unique presentation. (DASP Ch2:IB, D4, E II Intro, A-C; IFOMPT D6.S3)

D6S3. Demonstrate effective integration of evidence based practice and experiential reflective practice in clinical decision making. (DASP Ch6:C, D; IFOMPT D6.S4)

D6S4. Demonstrate skill in collaborating with the patient, caregivers and other health professionals in determining management goals, interventions and measureable outcomes. (DASP Ch2:IIA6, IV; IFOMPT D6.S5)

D6A1. Demonstrate effective collaboration, professionalism and communication skills in requesting further investigation or referral to another healthcare professional. (DASP Ch2:IIA5, VE, F, VIE; IFOMPT D6.A3)

D6A2. Demonstrate learning through critical reflection and metacognition during and after the clinical encounter. (DASP Ch2: I: Intro, B, E; IFOMPT D6.A4)

D6A3. Demonstrate learning through precise and timely reassessment. (DASP Ch2:IIV:A-F; IFOMPT D6.A5)

D6A4. Demonstrate awareness of the critical role of self reflection in the development of advanced clinical expertise. (DASP Ch2: Intro, I Intro, II Intro, V)

## **Dimension 7 Demonstrate an Advanced Level of Communication Skills**

D7K1. Demonstrate advanced knowledge of the processes of verbal and non-verbal communication with the OMPT patient/client. (DASP Ch2:ID3a,f,IIA6; IFOMPT D7.K1, D7.K2)

D7K2. Demonstrate advanced knowledge of the application of written communication and patient documentation. (DASP Ch2:IIA7,VII; IFOMPT D7.K3)

D7K3. Demonstrate advanced knowledge of effective communication with the OMPT patient/client, caregivers, healthcare professionals, and with individuals, groups, communities and the general population. (DASP Ch2:VID,E,VIID8)

D7S1. Demonstrate efficient and effective questioning strategies to obtain relevant information from the OMPT patient/client. (DASP Ch2:IE4a,IID1a; IFOMPT D7.S1)

D7S2. Demonstrate efficient and effective use of active listening skill throughout the episode of care for an OMPT patient/client. (IFOMPT D7.S2)

D7S3. Demonstrate effective explanation to the OMPT patient/client of his/her individual diagnosis, prognosis and management options. (DASP Ch2:IIA6,IVa, VDb,g,E4,VIIA1-6, IFOMPT D7.S3)

D7S4. Demonstrate the ability to involve the OMPT patient/client in the management of his/her health condition. (DASP Ch2:IIA6,C2,IIIB1,IVA1-8,VIID5, IFOMPT D7.S4)

D7S5. Demonstrate the ability to educate the OMPT patient/client, family, and caregivers in management utilizing an appropriate and effective teaching strategy. (DASP CH2:III,B1,6,7,1a-g,IVA, IFOMPT D7.S5)

D7S6. Demonstrate the ability to obtain informed consent from the OMPT patient/client as appropriate. (DASP Ch2:I:D3f,IVA8,VIID5, IFOMPT D7.S6)

D7S7. Demonstrate the ability to maintain accurate records of OMPT patient/client management in keeping with medical and legal requirements. (DASP Ch2:IIA6,7,IVa-d;VF3,VII; IFOMPT D7.S7)

D7S8. Demonstrate the ability to ascertain and document the OMPT patient/client response to treatment (DASP Ch2 IV,VII)

- For specific technique application.
- Within a treatment session.
- Across episode of care.

D7A1. Demonstrate awareness that patient centered communication is central to effective clinical practice. (DASP Ch2 Intro,IV:A; IFOMPT D7.A1)

## **Dimension 8 Demonstration of an Advanced Level of Practical Skills**

D8K1. Demonstrate advanced knowledge of indications for OMPT practical skills. (DASP Ch2:Intro,Intro,I,IB,C; IFOMPT D8.K1)

D8K2. Demonstrate advanced knowledge of precautions and contraindications for OMPT practical skills. (DASP Ch2:IA1b3,B8e,9b,c;C1; IFOMPT D8.K2)

D8K3. Demonstrate advanced knowledge of practical skill performance for the OMPT patient/client. (DASP Ch2:I:c2-7,D,D5; IFOMPT D8.K3)

D8K4. Demonstrate advanced knowledge and clinical reasoning in the continuous evaluation and modification of practical skills with the OMPT patient/client. (DASP Ch2:ID4-A:II; IFOMPT D8.K4)

D8K5. Demonstrate advanced knowledge and clinical reasoning in the progression of practical skills for the OMPT patient/client. (DASP Ch2:IV:Intro,A,B,VC1-4,D,E; IFOMPT D8.K5)

D8K6. Demonstrate accuracy in the interpretation of clinical data obtained. (DASP Ch2:ID3e,D4,D7a5,D7b1a-j,D7c1a-g,D7c7,IIA3,C2)

D8K7. Demonstrate ability to prioritize clinical findings and apply appropriate evidence-based information. (DASP Ch2:IB8,C7a-e,E2-4)

D8S1. Demonstrate appropriate observation and skillful handling in the examination and evaluation of posture and movement for the OMPT patient/client. (DASP Ch2:ID6a-c,D7a; IFOMPT D8.S1)

D8S2. Demonstrate skillful handling in the examination and performance of OMPT techniques for the articular system. (DASP Ch2:ID6c1,3,D7b,c,k; IFOMPT D8.S2)

D8S3. Demonstrate skillful handling in the examination and performance of OMPT techniques for the nervous system. (DASP Ch2:ID6c4,f,D7c7,D7i1-6; IFOMPT D8.S3)

D8S4. Demonstrate skillful handling in the examination and performance of OMPT techniques for the muscular, fascial, integumentary systems. (DASP Ch2:ID7a6,7d-f,h,J1,2,4; IFOMPT D8.S4)

D8S5. Demonstrate skillful handling in the application of screening tests in the practice of OMPT. (DASP Ch2:ID7i4,K; IFOMPT D8.S5)

D8S6. Demonstrate skillful handling in the application of a broad range of OMPT techniques. (DASP Ch2: IIIA,B1a,2,C,IVB; IFOMPT D8.S6)

D8S7. Demonstrate skillful handling in the performance of passive movement procedures including thrust and non-thrust manipulation techniques. (DASP Ch2:IVB; IFOMPT D8.S7)

D8S8. Demonstrate skillful handling and modification of therapeutic exercise techniques for the OMPT patient/client. (DASP Ch2:IVB1b; IFOMPT D8.S10)

D8S9. Demonstrate effective interpersonal and communication skills in the application of practical skills. (DASP Ch2:IVA; IFOMPT D8.A1)

D8A1. Appreciate the importance of interpersonal and communication skills in effective application of practical skills. (DASP Ch2:IVA; IFOMPT D8.A1)

D8A2. Appreciate the importance of adaptability of practical skills in the context of patient centered practice. (DASP Ch2:IVB,V Intro,A-D; IFOMPT D8.A2)

D8A3. Value creativity and innovation in the application of practical skills.

D8A4. Appreciate the importance of cultural competence and maintain respect of patients' personal space.

D8A5. Recognize the value of communication through handling utilizing verbal and non-verbal skills.

## **Dimension 9 Demonstrate an Understanding of the Role of Clinical Research in Advancing and Defining OMPT Practice**

D9K1. Demonstrate knowledge needed for identifying relevant clinical questions to be answered by the appropriate research. (DASP Ch6:A1,B1; IFOMPT D9.S2)

D9K2. Demonstrate knowledge needed for selecting appropriate qualitative or quantitative research designs to answer relevant clinical questions. (DASP Ch6:A5,6; IFOMPT D9.K1, D9.K2)

D9K3. Demonstrate knowledge of the resources available for constructing valid research designs.

D9K4. Demonstrate knowledge of research ethics related to the use of institutional review boards, human subjects, criteria for authorship, originality of research, publication of non-significant trials and other factors related to research integrity. (IFOMPT D9.K3)

D9K5. Demonstrate knowledge of the appropriate avenues for publishing research related to OMPT practice.

D9S1. Demonstrate the ability to construct a well-defined research question. (DASP Ch6:A1; IFOMPT D9.K2)

D9S2. Demonstrate the ability to prepare and disseminate relevant clinical findings through case reports, case series, research projects or other scholarly work.\* (DASP Ch6:E2)

D9S3. Demonstrate an ability to develop collaborative relationships to participate in and promote the spectrum of research efforts. (DASP Ch6:E1)

D9A1. Demonstrate the ability to integrate OMPT research into the greater body of research evidence. (DASP Ch6:D1-4)

D9A2. Demonstrate a willingness to work collaboratively to advance OMPT research efforts. (IFOMPT D9.A2)

\* An OMPT research project is defined as a process of systematic inquiry that provides new knowledge aimed at understanding the basis and mechanism of dysfunction, or improving the assessment and/or management of dysfunction. The process of systematic inquiry is designed to address a research question. The process may use a range of methodological perspectives and methods including literature review, as well as qualitative and quantitative approaches to address the research question.

## **Dimension 10 Demonstrate Clinical Expertise and Professional Commitment to the Development of OMPT Practice**

D10K1. Demonstrate advanced knowledge of OMPT, including its history, politics and trends. (DASP Ch1; IFOMPT D10.K1)

D10K2. Demonstrate advanced knowledge of current best evidence and the classic literature in OMPT theories, as well as diagnostic, prognostic and intervention techniques. (DASP Ch6:C,D; IFOMPT D10.K2)

D10S1. Demonstrate the ability to combine evidence, knowledge, skills, other clinical applications, patient preferences, circumstances, and environmental situations in determining an OMPT intervention. (DASP Ch2:IIA-D; IFOMPT D10.S1)

D10S2. Demonstrate efficiency in utilizing cues and recognizing clinical patterns found in the OMPT patient/client. (IFOMPT D9.K5)

D10S3. Demonstrate effective continued direct patient care. (DASP Ch2:VD; IFOMPT D9.S2)

D10S4. Demonstrate effective and efficient communication and interpersonal skills involving the patient and others in decision-making. (DASP Ch2:IVA; IFOMPT D9.S3)

D10S5. Demonstrate the ability to solve problems with accuracy and efficiency. (IFOMPT D9.S4)

D10S6. Demonstrate the ability to employ lateral thinking to generate new hypotheses or techniques to produce a positive outcome or plan of care. (IFOMPT D9.S5)

D10S7. Demonstrate sound professional judgments when selecting assessment and treatment techniques, evaluating benefit and risk. (DASP Ch2:IC3,B7i4a,IIIC3a)

D10S8. Demonstrate the ability to simultaneously monitor multiple dimensions of data during patient contact while maintaining a professional but relaxed communication style.

D10S9. Demonstrate efficient and effective use of a variety of techniques that encompass the breadth of OMPT. (DASP Ch2:IIIA-C; IFOMPT D9.S8)

D10S10. Demonstrate efficiency and effectiveness in the practice of OMPT in the clinical setting. (DASP Ch2:IC,D7I1)

D10S11. Demonstrate a patient-centered approach to practice, responding and rapidly adapting the assessment and intervention to the emerging data and the patient's perspective.

D10S12. Demonstrate efficient and effective use of OMT within one episode of care with patients with multiple inter-related or separate diagnoses and/or co-morbidities.

D10S13. Demonstrate scholarly contribution to the body of OMPT knowledge, skills and measurement of outcomes.

D10A1. Demonstrate professional, ethical and autonomous practice. (DASP Ch1; IFOMPT D10.A1)

D10A2. Demonstrate sound professional judgment, empathy and cultural competence in all patient interactions. (DASP Ch2:IAh,D7a8,IIA6; IFOMPT D10.A5)



#### IV. Orthopaedic Manual Physical Therapy Fellowship Curricular Requirements

The following prescriptive standards are minimum training standards for AAOMPT fellowship programs. They are consensus-derived through multiple review processes with program directors and fellows of AAOMPT. As minimum standards, the criteria should be exceeded per the discretion of the program directors and the faculty, based on desired and realized training outcomes and fellow-in-training feedback. The ongoing professional interaction and mentoring between faculty and fellows in training is critical to the professional growth and development of both parties. It is expected that clinical mentorship hours be accomplished by fellows of AAOMPT or equivalent credentials, and clinical practice hours be accomplished in settings where a fellow who is listed as program faculty is available, either personally or through phone or web-based technology, and that direct interaction takes place for a minimum of 40 hours (1 hour of mentoring for each 8 hours of patient care).

The following table demonstrates previous and current curricular requirements for AAOMPT-credentialed programs. Present guidelines are based on the 2008 DASP in Orthopaedic Manual Physical Therapy, the 2008 standards of our umbrella organization, the International Federation of Orthopaedic Manipulative Physical Therapists, APTA post-professional fellowship guidelines, and the APTA Vision 2020. Examples are provided of possible ways to meet these requirements in both full-time and part-time formats. The minimal time requirement of 11 months was used as the basis for the establishment of many of the requirements. Fellowship curriculum designs can take many different forms as long as minimal requirements are met.

<b>Curricular Requirement</b>	<b>1999 AAOMPT/ APTA Standards Minimum Requirements</b>	<b>2011 AAOMPT/ APTA Standards Minimum Requirements</b>	<b>Example: Full-Time Program</b>	<b>Example: Part-Time Program</b>
<b><i>Requirements for application to an OMPT fellowship program</i></b>	*Minimum of 1-2 years of post-professional orthopaedic clinical experience	*Minimum of one year of post-professional orthopaedic clinical experience with one of the following: *1. APTA residency training, 2) board-		

Curricular Requirement	1999 AAOMPT/ APTA Standards Minimum Requirements	2011 AAOMPT/ APTA Standards Minimum Requirements	Example: Full-Time Program	Example: Part-Time Program
		certified clinical specialist credential (eg, OCS), or 3) equivalent of the above determined through portfolio review process		
<b>Minimum and maximum length of program</b>	Fellowship training should be completed in no less than <b>eleven (11) months and no longer than 36 months.</b>	Unchanged	Per APTA/ AAOMPT requirements	Per APTA/ AAOMPT requirements
<b>Minimum total of hours</b>	The fellowship will be a structured period of study and clinical supervision of a minimum total of <b>1,000 hours.</b>	Unchanged	Per APTA/ AAOMPT requirements	Per APTA/ AAOMPT requirements
<b>Theoretical classroom instruction in OMPT and related sciences</b>	200 hours	Unchanged	5 hours /week X 40 weeks	10 weekend courses of 20 hours each
<b>MT lab practical (on-site)</b>	100 spine 60 peripheral=160 hours  Added to theoretical total = 360 hours required	Unchanged	4 hrs/wk X 40 weeks =160 hours	10 weekend courses of 16 hours each = 160 hours
<b>Mentored clinical practice</b> Identifying appropriate OMPT patients  Timely access to faculty/ fellow for clinical questions  Opportunities to observe	310 hours  Instructor: fellow-in-training ratio should not exceed 1:6.  Note: There are 440 hours total 440 = 310 clinical practice hours plus 130 hours of 1:1 mentoring time. (instructor: fellow-in-training ratio should not exceed 1:6)	310 hours  Instructor: fellow-in-training ratio should not exceed 1:6. 40 hours (1 hour of mentoring for each 8 hours of patient care) of onsite or phone/web-based technology interaction required); these 40 hours are not included as a part	10 hours /week over 40 weeks. These hours are over and above the clinical mentorship hours.	2 days (8 hour days) /month for 20 months

Curricular Requirement	1999 AAOMPT/ APTA Standards Minimum Requirements	2011 AAOMPT/ APTA Standards Minimum Requirements	Example: Full-Time Program	Example: Part-Time Program
<p>faculty/fellow in clinical practice</p> <p>Tracking of patient categories</p> <p>Peer and faculty review of documentation</p>		<p>of the 130 hours of 1:1 mentoring. Clinical practice hours should be accomplished in a manner that allows the faculty to observe the capabilities of the fellow-in-training while managing patients across the cycle of care, from initial evaluation to discharge.</p>		
<p><b>1:1 Clinical mentorship</b></p> <p>On-site, one-on-one mentor supervision of the fellow-in-training while actively engaged in patient/client management. The mentor is working solely with one fellow during this time and has no other administrative or clinical duties.</p>	<p>130 hours</p>	<p>150 hours is recommended; 130 hours is required.</p> <p>20 of the 130 hours may be devoted to observation, discussion and interaction with the mentor. Mentoring hours should be distributed over the duration of the fellowship.</p>	<p>4 hours /week X 33 weeks</p>	<p>20 hours /week scheduled 6.5 X at 2 month intervals</p>
<p><b>Peer/ faculty manual technique practice sessions</b></p>	<p>Not specified</p>	<p>40 hours</p> <p>Fellows-in-training are encouraged to maintain a log of practice hours; it is recommended that practice occur with another fellow-in-training or a fellow.</p>	<p>One hour/week over 40 weeks</p>	<p>One hour/week over 40 weeks</p>

Curricular Requirement	1999 AAOMPT/ APTA Standards Minimum Requirements	2011 AAOMPT/ APTA Standards Minimum Requirements	Example: Full-Time Program	Example: Part-Time Program
<p><b>Small group tutorial</b>  <b>defined:</b> time spent with a mentor in an interactive small group format. Purpose is to promote integration of practical skills/theoretical constructs (Note: These 40 hours are distinct from mentored clinical practice hours).</p>	40 hours	Unchanged Activities potentially included in the 40 hours of tutorial: <ul style="list-style-type: none"> <li>• Diagnostics</li> <li>• Professional ethics</li> <li>• Professional development</li> <li>• Reflection online – separate from all of the above.</li> </ul>	One hour/week over 40 weeks	Five 1 hour sessions over a period of a week – to be repeated 8X (e.g. every 6 weeks) over the period of 12 months either in person or online
<p><b>Scholarly activity</b></p>	Scholarly product such as case report or capstone project (recommended)	Required; product to be determined by individual program.		
<p><b>Competency evaluation</b></p>	The program will use a variety of methods to assess the clinical competence of the fellow. The fellow-in-training must demonstrate safe and effective patient/client management in a clinical setting with an examiner present. At a minimum, the following methods of assessment will be included in the program: <ol style="list-style-type: none"> <li>1. One written examination</li> <li>2. Four technique examinations on models and/or patients with a minimum of one technique demonstrated during each exam.</li> <li>3. One patient examination</li> </ol>	Unchanged		

<b>Curricular Requirement</b>	<b>1999 AAOMPT/ APTA Standards Minimum Requirements</b>	<b>2011 AAOMPT/ APTA Standards Minimum Requirements</b>	<b>Example: Full-Time Program</b>	<b>Example: Part-Time Program</b>
	<p>with a spinal/axial focus (Ideally one evaluation and two follow-ups). The fellow-in-training may be required to demonstrate skill in application of low velocity and high velocity manipulative (thrust) techniques.</p> <p>4. One patient exam with a peripheral /appendicular focus (Ideally one evaluation and two follow-ups). The fellow-in-training may be required to demonstrate skill in application of low velocity and high velocity manipulative (thrust) techniques.</p> <p>5. Oral defense: the fellow-in-training should be able to orally defend the examination and treatment decisions following each patient examination.</p> <p>6. Ongoing informal assessments of clinical competence</p>			
<b>Professional activity</b>	<p>Strongly recommend that all faculty and students are members of the APTA and AAOMPT professional organization.</p> <p>The program will educate fellows-in-training on requirement of continued professional development in the areas of clinical practice, education, teaching, scholarship and service, as outlined by the 10-year fellowship renewal requirements.</p>	Unchanged		
<b>Fellowship training sites</b>	Meet APTA guidelines for credentialing of OMPT	Unchanged		

<b>Curricular Requirement</b>	<b>1999 AAOMPT/ APTA Standards Minimum Requirements</b>	<b>2011 AAOMPT/ APTA Standards Minimum Requirements</b>	<b>Example: Full-Time Program</b>	<b>Example: Part-Time Program</b>
	programs; adhere to APTA code of ethics.			

## V. Glossary

**Assessment** The measurement or quantification of a variable or placement of a value on something. (Guide to Physical Therapist Practice 2<sup>nd</sup> ed. 2001)

**Behavioral science** Any of the various interrelated disciplines, such as psychiatry, psychology, sociology, and anthropology that observe and study human activity, including psychologic and emotional development, interpersonal relationships, values, and more. (Mosby's Medical Dictionary, 8<sup>th</sup> ed. 2009)

**Biomedical** Relating to the activities and applications of basic science to clinical medicine. (Mosby's Medical Dictionary, 8<sup>th</sup> ed. 2009)

**Client** Individual who is not necessarily sick or injured but who may benefit from a physical therapist's consultation, professional advice, or services. (Guide to Physical Therapist Practice 2<sup>nd</sup> ed. 2001)

**Clinical science** Comprising the contributions of scientific disciplines to health promotion and prevention, diagnosis, and treatment of disease through the development, communication, and application of new knowledge. (Higgs and Jones 2000)

**Clinical reasoning** A process in which the therapist, interacting with the patient and significant others (e.g. family and other health-care team members), structures meaning, goals and health management strategies based on clinical data, clients' choices and professional judgment and knowledge. (Higgs and Jones 2000)

**Culture** The attitudes and behaviors that are characteristic of a particular social group or organization at a particular time and place.

**Cultural sensitivity** Being aware that cultural differences and similarities exist and have an effect on values, learning, and behavior.

**Cultural competence** The ability to interact effectively with people of different cultures.

**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. (Guide to Physical Therapist Practice 2<sup>nd</sup> ed. 2001)

**Differential diagnosis** Evidence- and hypothesis-based strategies for diagnosis, screening and systems review in physical therapist practice.

**Dysfunction** Disturbance, impairment, or abnormality of function of an organ.

**Examination** A comprehensive and specific testing process performed by a physical therapist that leads to diagnostic classification or, as appropriate, to a referral to another practitioner. The examination has three components: the patient/client history, the systems review, and tests and measures. (Guide to Physical Therapist Practice 2<sup>nd</sup> ed. 2001)

**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. (Guide to Physical Therapist Practice 2<sup>nd</sup> ed. 2001)

**Evidence-based practice** The integration of the best possible research evidence with clinical expertise and patient values, to optimize patient/client outcomes and quality of life to achieve the highest level of excellence in clinical practice. (Sackett 2000)

**Fellow** "Fellow" status in the AAOMPT is both a membership classification and a professional credential. As a professional credential, a "fellow" in AAOMPT is an international recognition of competence and expertise in the practice of orthopaedic manual physical therapy by a physical therapist licensed in the USA. To maintain the professional credential of fellow, a physical therapist must be a member in good standing in the AAOMPT. ([www.aaompt.org](http://www.aaompt.org))

**Fellow-in-training** A physical therapist enrolled in a credentialed OMPT fellowship program.

**Fellowship education** A post-professional, funded, and planned learning experience in a focused area of physical therapist clinical practice, education, or research (not infrequently post-doctoral, post-residency prepared or board-certified physical therapists). ([www.apta.org](http://www.apta.org))

**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.

**Impairment** A loss or abnormality of physiological, psychological, or anatomical structure or function. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**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. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**Live patient exam** Examination of the ability of a fellow-in-training to execute an initial OMPT evaluation and perform an appropriate treatment in an evidence-based manner.



The live patient exam should include assessment of all dimensions within the scope of OMPT and ideally, would include a follow-up visit.

**Manual therapy** A specialized area of physical therapy for the management of musculoskeletal conditions, based on clinical reasoning, using highly specific manual techniques and therapeutic exercises. It encompasses, and is driven by, the available scientific and clinical evidence and the biopsychosocial framework of each individual patient. (2008 IFOMPT Standards Document)

**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. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**Mentored/guided clinical practice** Clinical practice hours completed in a facility with an orthopaedic manual physical therapist instructor (fellow) available.

**Mentorship (1:1)** On-site, one-on-one instructor (fellow) supervision of the manual physical therapy fellow while actively engaged in patient/client management.

**Metacognition** Awareness of one's cognitive processes; cognitive skills necessary for management of knowledge and other cognitive skills. (Higgs and Jones 2000)

**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 a small amplitude/high velocity therapeutic movement. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**Non-thrust manipulation** Those manipulations that do not involve thrust. (Manipulation Education Manual: APTA and AAOMPT 2004)

**OMPT patient/client:** Individual who is the recipient of physical therapy examination, evaluation, diagnosis, prognosis, and intervention and who has a disease, disorder, condition, impairment, functional limitation, or disability. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**Pain** An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage. (International Association for the Study of Pain, Task Force on Taxonomy)

**Patient management** Generating, planning, organizing, and administering physical therapy care and services for patients.

**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. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**Posture** The alignment and positioning of the body in relation to gravity, center of mass, and base of support. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**Practical skill** The safe and competent use of one's hands and body to apply examination and intervention techniques for the management of the OMPT patient/client.

**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. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**Research project** A process of systematic inquiry that provides new knowledge aimed at understanding the basis and mechanism of dysfunction, or improving the assessment and/or management of dysfunction. The process of systematic inquiry is designed to address a research question. The process may use a range of methodological perspectives and methods including literature review as well as qualitative and quantitative approaches to address the research question.

**Referral** A recommendation that a patient/client seek service from another health care provider or resource. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**Scholar** A learned person; someone who by long study has gained mastery in one or more disciplines.

**Scholarly activity** A demonstration of academic excellence in the areas of discovery, teaching and learning, application, and integration. (Boyer 1990)

**Screening** Determining the need for further examination or consultation by a physical therapist or for referral to another health professional. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**Somatosensory** Pertaining to sensory information received from all tissues of the body including skin, viscera, muscles, and joints. (Mosby's Medical Dictionary, 8<sup>th</sup> ed. 2009)

**Symptoms** Any subjective evidence of disease or of a patient/client's condition. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**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. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**Thrust manipulation** A high velocity, low amplitude therapeutic movement within or at end range of motion. (Manipulation Education Manual: APTA and AAOMPT 2004)

**Treatment** The sum of all interventions provided by the physical therapist to a patient/client during an episode of care. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**Tutorial** Small-group discussions at a clinical training site at a defined time or over the internet in a chat room environment. The tutorial can serve many purposes but needs to have defined objectives that relate to the curriculum. (APTA Guidelines for Curriculum Development, 2001)

**Referral** A recommendation that a patient/client seek service from another health care provider or resource. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

**Non-verbal communication** The process of communication through sending and receiving wordless messages. Examples are: gestures, facial expressions, body language, posture, glances and touch.

**Wellness** Concepts that embrace positive health behaviors promoting a state of physical and mental balance, and fitness. (Guide to Physical Therapist Practice, 2<sup>nd</sup> ed. 2001)

## VI. ACRONYMS AND SYNONYMOUS TERMS

### ACRONYMS

AAOMPT:	American Academy of Orthopaedic Manual Physical Therapy <a href="http://www.aaompt.org">www.aaompt.org</a>
APTA:	American Physical Therapy Association <a href="http://www.apta.org">www.apta.org</a>
DASP:	Description of Advanced Specialty Practice for Orthopaedic Manual Physical Therapy <a href="http://www.aaompt.org/publications/dasp.cfm">www.aaompt.org/publications/dasp.cfm</a>
EBP:	Evidence-based practice/ Evidence-based procedures
EBM:	Evidence-based medicine
FTE:	Full-time employee/equivalent
ICF:	International Classification of Functioning, Disability and Health <a href="http://www.who.int/classifications/icf">www.who.int/classifications/icf</a>
IFOMPT:	International Federation of Orthopaedic Manipulative Physical Therapists <a href="http://www.IFOMPT.org">www.IFOMPT.org</a>
MPT:	Manual physical therapy
MS:	Musculoskeletal
MT:	Manual therapy
OMPT:	Orthopaedic manual physical therapy
PT:	Physical therapy
WCPT:	World Confederation of Physical Therapy <a href="http://www.wcpt.org">www.wcpt.org</a>

### SYNONYMOUS TERMS

Guided clinical practice:	Mentored clinical practice
Orthopaedic:	Orthopedic
EBM:	EBP
IFOMT:	IFOMPT
Clinical reasoning:	Clinical decision-making

## VII. REFERENCES

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## VIII. AAOMPT EDUCATIONAL STANDARDS – A HISTORICAL PERSPECTIVE

### Introduction

The standards document for orthopaedic manual physical therapy fellowship is an ongoing work that has evolved over many years with contributions by orthopaedic manual physical therapists from across the US. These revised AAOMPT standards reflect what has been occurring in medical education nationally and internationally as educational models transform from curriculums that are prescriptive in nature to more outcome-based models. They also embrace the post-professional educational pathway of clinical residency and fellowship education as an alternative or adjunct to the academic pathway. The IFOMPT\* standards document (2008) serves as a model to assure minimum standards are met and are in keeping with the international standard. This AAOMPT standards document strives to reflect the best and the most current educational standards as they apply to OMPT fellowship education.

The AAOMPT\*\* is a national professional organization that represents physical therapists whose professional pathway is orthopaedic manual physical therapy (OMPT). This pathway can include clinical practice, education, research and community service. 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 keeping with this, educational standards for OMPT are a keystone to the Academy’s advancement of residency and fellowship education as embraced by the American Physical Therapy Association (APTA.)

### The Early History of the AAOMPT

The original standards document has its roots with the inception of the AAOMPT in August 1991 when representatives from eight manual physical therapy residency programs in the United States met at Oakland University in Rochester, Michigan. The meeting was organized by Kornelia Kulig and the faculty of Oakland University along with Norwegian manual therapist, Freddy Kaltenborn. The participants came from various orthopaedic physical therapy backgrounds with the common interest of pooling together resources and expertise to develop standards of OMPT residency education in the United States. The Founding Members, as this group is designated, and their affiliate programs were:

Dick Erhard, PT, DC  
University of Pittsburgh  
Pittsburgh, PA

\*Prior to October 2009, IFOMPT was known as IFOMT.

\*\*AAOMPT and the Academy may be used interchangeably throughout this document and refer to the same organization.

Joseph P. Farrell, PT, MS, Grad. Dip. Manip. Ther.  
Kaiser Permanente Physical Therapy Residency Program in Advanced  
Orthopaedic Manual Therapy  
Hayward, CA

Ola Grimsby, PT, MNSMT, MNFF  
Ola Grimsby Institute  
San Diego, CA

Kornelia Kulig, PT, PhD  
Oakland University  
Rochester, MI

Michael J. Moore, PT  
Folsom Physical Therapy  
Folsom, CA

Stanley V. Paris, PT, PhD  
Institute of Physical Therapy  
(University of St. Augustine for Health Sciences)  
St. Augustine, FL

Michael D. Rogers, PT, OCS  
Gulf Coast Graduate Physical Institute  
Advanced Residency in Orthopaedic Manual Physical Therapy  
Gulfport, MS

Bjorn Svendsen, DHSc, PT  
Residency Program in Medical Exercise and Manual Therapy  
Lansing, MI

The AAOMPT was established with a written constitution, the election of officers called the Executive, and creation of special committees to launch the new organization. The first Executive officers were:

Joseph P. Farrell, PT, MS	President
Richard Erhard, PT, DC	Vice President
Michael Moore, PT	Secretary
Ola Grimsby, PT, MNSMT, MNFF	Treasurer
Stanley V. Paris, PT, PhD	Member-at-Large

The Special Committees were:

Examination Committee	Richard Erhard, PT, DC (Chairperson) Bjorn Svendsen, DHSc, PT Ola Grimsby, PT, MNSMT, MNFF
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Trish King Baker, MA, PT  
Institute of Graduate Physical Therapy  
(University of St. Augustine for Health  
Sciences)

Membership Committee

Michael Rogers, PT, OCS

Standards Committee

Carol Jo Tichenor, MA, PT  
Physical Therapy Residency Program in  
Advanced Orthopaedic Manual  
Therapy  
Kaiser Permanente Medical Center  
Hayward, CA  
Joe Farrell, PT, MS  
Kornelia Kulig, PT, PhD

## **Objectives of the AAOMPT**

The constitution and bylaws of the Academy identified the following original objectives:

- To provide a mechanism of national accreditation and approval of orthopaedic manual physical therapy residency programs.
- To provide a forum where persons having a common interest in OMPT may meet, confer, and promote their research, practice and patient care issues.
- To maintain membership of the Academy in the International Federation of Orthopaedic Manipulative Physical Therapists (IFOMPT)
- To seek cooperation with the APTA in furthering the goals of the physical therapy profession.

In its efforts to seek and maintain a strong relationship with the APTA, the Academy had frequent communication with the President of the Orthopaedic Section of the APTA at that time, Jan Richardson, PT, PhD, and with members of the APTA Executive Board regarding the vision, goals and objectives of the AAOMPT. In February 1992, multiple discussions between the AAOMPT Executive and the Orthopaedic Section took place during the Combined Sections Meeting, culminating with a unanimous vote for the Orthopaedic Section and the Academy to collaboratively apply for full voting member status in IFOMPT. The AAOMPT was officially recognized by the Orthopaedic Section of the APTA as the United States' liaison organization with IFOMPT.

## **The Development and Evolution of the Standards Document**

The next step for the Academy was to proceed with the task of developing educational standards for OMPT residency training in the United States. Residency and fellowship training has a strong emphasis in clinical education with mentoring incorporated



throughout. This educational pathway is critical for development of advanced clinical reasoning and handling skills on the road to expertise, and over time we envision this to be the path of choice in advancing those skills.

The first educational standards for residency education across OMPT programs were developed by consensus involving the eight original residency programs. This took several steps to ensure that all programs had a voice. These standards were modeled after the educational guidelines of the IFOMPT and provided a framework of prescriptive elements related to didactic/theoretical hours, clinical time spent with patients, 1:1 mentoring time, and examination requirements. These standards formed the basis for the application that was presented to the IFOMPT Executive and Standards Committees in Vail, Colorado in 1992. The ten delegate nations of IFOMPT voted unanimously to accept the United States as a full voting member. The application itself was highly praised at the time.

The first formal standards document was written in 1993 by Joe Farrell, Kornelia Kulig and Carol Jo Tichenor. The document incorporated all of the prescriptive aspects and curricular elements as agreed upon by the eight residency programs already in existence. Future programs seeking recognition by the AAOMPT would use this document as a guide, and the prescriptive elements were minimum requirements that had to be met. The Standards Committee used this document with the checklist of minimum requirements to review applications and the formalized process began in 1995. Once a program met the standards, it could become an institutional member of the Academy, and its graduates could be designated as Fellows of the Academy. The graduates had to be in the program at the time of application and within the timeframe of recognition. This was the first step toward a national process as no other mechanism for residency education existed at that time. The AAOMPT standards document assured integrity and consistency with the recognition process. It was a voluntary, non-punitive process. The Sports Physical Therapy Section of APTA had a similar program in place with attached minimum requirements to provide approval of sports physical therapy residencies.

The original group of eight OMPT residency programs grew to thirteen (13) recognized programs by 2001. The AAOMPT standards document was revised in 1999 to create a more “user friendly” document for the program recognition process. There were no changes to the minimum requirements.

## **APTA Residency and Fellowship Credentialing**

During the 1980s, the APTA created a national task force to explore and develop ideas around residency training as a post-professional educational pathway. There were already a few post-professional residencies in the US that began in the late 1970s modeled after the manual therapy residency programs of Australia and Norway. The collaboration of a number of groups including the Orthopaedic Section and the AAOMPT to facilitate the growth in residency education culminated with the creation of a formal APTA credentialing process for clinical residency programs in 1998. This

formal application and credentialing process evolved into credentialing of both **residency programs** within specialty areas, and **fellowship programs** within subspecialty areas. By definition, OMPT programs fall within the fellowship category, as OMPT is a subspecialty of orthopaedics as defined here in the United States. The APTA recognized OMPT post-professional programs as fellowships in November, 2001. Another distinction between residency and fellowships concerns the applicants. Those applicants entering OMPT programs come with a certain level of experience in the specialty area, while residency applicants can be new graduates of professional programs. Once the OMPT Description of Clinical Practice (1998) was created, it further defined the difference between an orthopaedic specialist and an OMPT practitioner at an advanced level. The present Description of Advanced Specialty Practice (DASP), 2008, is the most current document.

By 2001, the AAOMPT Standards Committee and Executive Committee agreed to the merging of the APTA credentialing and AAOMPT recognition processes. The APTA process for credentialing of residencies and fellowships initially did not require a minimum number of contact hours, clinical mentoring hours and examinations for clinical competency. The Academy leadership felt strongly that the minimum hours as defined in these areas by the standards document of 1999 should remain OMPT requirements. At the Combined Sections Meeting in February 2001, the APTA and AAOMPT agreed that the APTA would be the organization that would credential the OMPT fellowship programs and would include additional requirements for OMPT fellowships, as negotiated.

Since that time, the Committee for Clinical Residency and Fellowship Program Credentialing (CCRFPC) has included one sitting member of the five who serves as a content expert for OMPT, and the Academy representative. The APTA credentialing of OMPT programs now uses all of the minimum didactic/theoretical, clinical mentoring and examination requirements as described in the AAOMPT standards document.

The revision of the Standards for Orthopaedic Manual Physical Therapy Fellowship Education is a critical piece for the Academy to regularly undertake. As with all educational documents it is evolving as the professional evolves. Any questions about content can be directed to the AAOMPT Standards Committee.

## **International Federation of Orthopaedic Manipulative Physical Therapists (IFOMPT)**

The International Federation of Orthopaedic Manipulative Physical Therapists is a recognized non-governmental sub-group of the World Confederation of Physical Therapy (WCPT). The IFOMPT is an organization made up of member countries, not individual programs or physical therapists. To become a member organization (MO), each country must apply through its representative physical therapy organization. The AAOMPT is that recognized body in the United States as agreed upon by the Academy, the APTA and the Orthopaedic Section. To qualify for membership, the application must include educational standards that encompass requirements for theoretical content,

practical content, scientific inquiry and clinical supervision for post-professional education of physical therapists in orthopaedic manual therapy. Formal assessment of theoretical and clinical practice knowledge needs to be in place with examinations.

The IFOMPT Educational Standards document is divided into two sections: Part A, Educational Standards (2008); and Part B, International Monitoring (2005). The revised document includes the scope and dimensions of orthopaedic manual physical therapy (OMPT) practice and expected competencies.

The guidelines for formulating OMPT programs (Appendix 2) are presented as expectations of a minimum number of contact hours, mentored practice and a variety of methods to evaluate competency.

The IFOMPT member organizations voted in Cape Town, in March 2004 to introduce a process of international monitoring to ensure that educational programs accepted by IFOMPT are satisfying these education standards and producing physical therapists who are able to deliver a high standard of patient care in the area of OMPT. Each member country's representative organization is reviewed every 3 years.

The international monitoring report to the IFOMPT Standards Committee demonstrates how the member organization monitors quality control and quality assurance in all its recognized OMPT programs. AAOMPT presented its first international monitoring report in 2011 and will do so every 3 years thereafter.