INTERNATIONAL FEDERATION OF ORTHOPAEDIC MANIPULATIVE THERAPISTS

IFOMT

EDUCATIONAL STANDARDS IN ORTHOPAEDIC MANIPULATIVE PHYSICAL THERAPY

PART A: EDUCATIONAL STANDARDS

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1. PREAMBLE

Orthopaedic Manipulative Therapy (OMT) is a specialisation within Physical Therapy, which is concerned with the prevention and conservative management of pain and other symptoms of neuromusculoskeletal (NMS) dysfunction in the spine and extremities.

IFOMT is a non-government International Manipulative Therapy Federation representing international collaboration in Manipulative Therapy. It is concerned with Manipulative Therapy and Physical Therapists, and is a recognised sub group of the World Confederation for Physical Therapy (WCPT), which in turn is a part of the World Health Organisation (WHO).

2. CATEGORIES OF MEMBERSHIP

2.1 Full member

A Manual Therapy Association or Organisation of Manual Therapy Groups may be admitted to membership provided that:

- its members hold a Physical Therapy qualification recognised at national level in that country
- the Association / Organisation is recognised as the OMT representative by the country's parent National Physical Therapy Body, which is a member of WCPT
- the Association/Organisation's by-laws are in harmony with those of IFOMT and its educational standards are consistent with those held by IFOMT.

2.2 Registered Interest Group

A nationally recognised Manual Therapy Group who have not as yet established an IFOMT approved education or examination system, but wish to achieve full membership in the future.

3. EDUCATIONAL STANDARDS

An educational curriculum referred to as the "STANDARDS" was first presented in 1977 at the IFOMT meeting in Vail, USA. It was ratified in Israel at WCPT in 1978. The curriculum covers the post-graduate training of Physical Therapists in OMT. A revised curriculum was accepted in 1992 at the IFOMT meeting in Vail, USA. The educational standards, Part A (accepted 2000) extended the basic training received in OMT in undergraduate Physical Therapy training programmes so that Orthopaedic Manipulative Physical Therapists attain a high standard of patient care. The document detailing the processes of International Monitoring were accepted in Cape Town (2004) and added to the Standards Document as Part B.

The strategic plan for IFOMT (2001) identified the requirement for a six year review process of the Standards Document that was required for 2006. The Standards Committee designed a questionnaire to enable all Member Organisations to comment on the currency of the document including its strengths, weaknesses, structure, format, and content. The findings from the questionnaire were discussed at the first face to face meeting of the Standards Committee in Charlotte, USA in October 2006. The outcome of the discussion was agreement that there was a need to update the document and to move towards a competency based framework of standards in line with contemporary educational practice.

The Standards Committee developed the current document assisted through a further meeting in Vancouver 2007, incorporating the feedback from Member Organisations at each stage. The final document was presented prior to the IFOMT meeting in Rotterdam 2008 to enable voting on its acceptance by the Member Organisations. The new document will enable Registered Interest Groups and Member Organisations to map and develop existing curricula to the new standards defined as dimensions and competencies with guidance and support from the Standards Committee.

The educational aims and objectives (2000) have been developed into competencies, which are not absolute but rather serve as a detailed guide towards standards of education and training acceptable to IFOMT. They cover theoretical, practical and clinical knowledge applied to NMS dysfunction in the spine and extremities, and provide the minimum requirements for IFOMT membership. IFOMT recognises that there will be differences in strengths and emphases in different OMT courses around the world. These differences are necessary and encouraged by IFOMT for the future development of OMT. IFOMT also recognises that differences will exist in methods and delivery of education in various countries. IFOMT has a commitment to research and recognises the importance of evidence based OMT diagnosis and practice. It fosters inquiry and encourages Orthopaedic Manipulative Physical Therapists' involvement in research.

The acceptance and implementation of the educational standards both theoretical and practical are a mandatory minimum requirement for countries seeking full membership of IFOMT. Formal evaluations to demonstrate member competency are prerequisite for ongoing membership status of the Member Organisation.

This document has been developed using the UK English system of spelling.

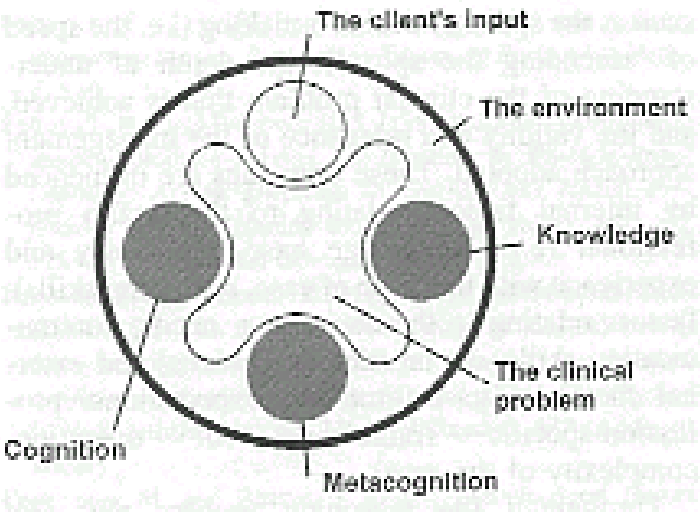
4. ORTHOPAEDIC MANIPULATIVE THERAPY (OMT)

The definition of OMT (as voted in at the General Meeting in Cape Town, March 2004) is:

> "Orthopaedic Manual Therapy is a specialised area of physiotherapy / Physical Therapy for the management of NMS conditions, based on clinical reasoning, using highly specific treatment approaches including manual techniques and therapeutic exercises.
>
> Orthopaedic Manual Therapy also encompasses, and is driven by, the available scientific and clinical evidence and the biopsychosocial framework of each individual patient".

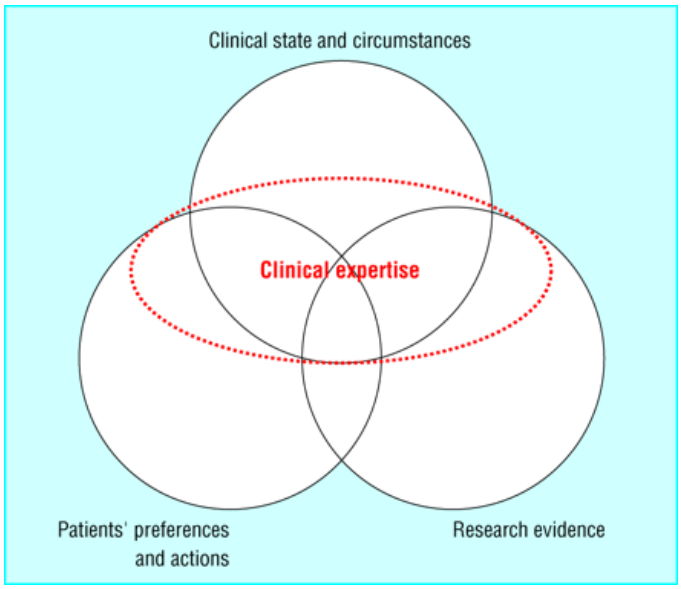
OMT Physical Therapists can act as the principal provider of patient care or as a member of an interprofessional team within a health care system. Advanced clinical reasoning skills are central to the practice of OMT Physical Therapists, ultimately leading to decisions formulated to provide the best patient care. Clinical decisions are established following consideration of the patient's clinical and physical circumstances to establish a clinical physical diagnosis and treatment options. The decisions are informed by research evidence concerning the efficacy, risks, effectiveness, and efficiency of the options (Haynes, 2002). Given the likely consequences associated with each option, decisions are made using a model that views the patient's role within decision making as central to practice (Higgs and Jones, 2000), thus describing a patient centred model of practice.

Figure 1: Patient centred clinical reasoning model (Higgs and Jones, 2000)



Therefore, practice in OMT is informed by a complex integration of research evidence, the patient's preferences and the patient's individual clinical presentation as illustrated in the following model of expertise:

Figure 2: Model of clinical expertise (Haynes et al, 2002)



The application of OMT is based on a comprehensive assessment of the patient's NMS system and of the patient's functional abilities. This examination serves to define the presenting dysfunction(s) in the articular, muscular, nervous and other relevant systems; and how these relate to any disability or functional limitation as described by the WHO's International Classification of Functioning, Disability and Health (ICF).[1] Equally, the examination aims to distinguish those conditions that are indications or contraindications to OMT Physical Therapy and / or demand special precautions, as well as those where anatomical anomalies or pathological processes limit or direct the use of OMT procedures.

OMT includes a large range of therapeutic procedures such as passive movements (mobilisation and / or manipulation), and rehabilitative exercises as well as other interventions and modalities. The main aims of OMT are to relieve pain and to optimise the patient's functional ability.

[1] [1] The ICF is WHO's framework for measuring health and disability at both an individual and broader population level. The ICF places emphasis on the effects of health and disability, and takes into account the social aspects of disability and does not see disability only as 'medical' or 'biological' dysfunction. By including Contextual Factors, in which environmental factors are listed, ICF enables evaluation of the impact of the environment on the person's functioning.

5. THE SCOPE OF OMT PRACTICE

OMT Physical Therapists provide advanced knowledge of comprehensive conservative management characterised by the analysis, interpretation and treatment of health problems resulting from NMS disorders.

In order to work effectively as an OMT 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 OMT Physical Therapist can be described in seven clinical roles. The competencies detailed in section 8 are central to these defined roles and the effective working of an OMT Physical Therapist.

1) The OMT Physical Therapist as an expert / clinical decision-maker / clinician
2) The OMT Physical Therapist as a communicator
3) The OMT Physical Therapist as a collaborator
4) The OMT Physical Therapist as a manager
5) The OMT Physical Therapist as a health advocate
6) The OMT Physical Therapist as a scholar
7) The OMT Physical Therapist as a professional

(http://www.deptmedicine.utoronto.ca/CanMEDS.htm)

5.1 The OMT Physical Therapist as an Expert / Clinical Decision Maker / Clinician

OMT Physical Therapists systematically collect quantitative and qualitative information relevant to the patient's health problems and needs in evaluating the NMS system. This enables formulation of a management plan based on evidence based principles. This role draws on the competencies required for the roles of communicator, collaborator, manager, health advocate, scholar and professional.

5.2 The OMT Physical Therapist as a Communicator

Excellent verbal and non-verbal communication skills are required for building effective partnerships and establishing rapport with patients, care givers, health professionals, other sectors and stakeholders, and the media. These skills are required to communicate between the OMT Physical Therapist and individuals, groups, the community and the general population. These abilities are critical in empowering individuals / target groups to make informed decisions about their health and are essential in eliciting patients' / target groups' needs, beliefs and expectations about their health.

5.3 The OMT Physical Therapist as a Collaborator

OMT Physical Therapists work in partnership with patients with respect to their care, and with others who are involved in the care of individuals, specific groups, communities or populations. It is therefore essential for the OMT Physical Therapist to be able to collaborate effectively to build sustainable and equitable relationships with patients and multi-disciplinary teams to facilitate the attainment of meaningful outcomes and health gains. This does not reduce the need, however, for the OMT Physical Therapist to be able to function independently when required (e.g. working in a remote location).

5.4 The OMT Physical Therapist as a Manager

OMT Physical Therapists function as managers when they make everyday practice decisions involving resources, co-workers, tasks, policies and their personal lives. They do this in the settings of hospitals, private clinics, community health centres, health promotion units, and in the broader

context of the health care system. Thus, OMT Physical Therapists are required to prioritise and effectively execute tasks through teamwork with colleagues, and make systematic decisions when allocating finite health care resources. As managers, OMT therapists take on positions of leadership within the context of professional organisations and the health care system.

5.5 The OMT Physical Therapist as a Health Advocate

The OMT Physical Therapist recognises the importance of advocacy activities in responding to the challenges represented by those social, environmental, and biological factors that determine the health of patients and society. They recognise advocacy as an essential and fundamental component of health promotion that occurs at the level of the individual patient, the practice population, the health care team, the broader community, the media and at all levels of government. Health advocacy is measured by both the individual and collective responses of OMT Physical Therapists to health issues that impact at all levels of health care from the individual through to the development of public health initiatives and policy.

5.6 The OMT Physical Therapist as a Scholar

The OMT Physical Therapist engages in a lifelong pursuit of mastery of their domain of professional expertise. They recognise the need to be continually learning and model this for others. Through their scholarly activities, they contribute to the appraisal, collection, and understanding of health care and relevant scientific knowledge, and facilitate the education of their students, patients, colleagues and others.

5.7 The OMT Physical Therapist as a Professional

The OMT Physical Therapists have a societal role as professionals with a distinct body of knowledge, skills and attributes dedicated to improving the health and well-being of others. OMT Physical Therapists are committed to the highest standards of excellence in clinical care and ethical conduct, and to the continued development of mastery of their discipline, through continuing personal and professional development. This will in turn contribute to the development of Physical Therapy as a profession.

6. A COMPETENCY FRAMEWORK FOR OMT

6.1 Purpose of the Competency Framework

The Educational Standards in OMT provide a clear and detailed description of the knowledge, skills and attributes expected of a competent OMT Physical Therapist in the contemporary healthcare environment. A competency framework was selected as the most appropriate vehicle for this purpose, as it is consistent with current adult learning theory and because it provides a contextual understanding of the required outcomes of a programme in OMT.

Importantly, the framework permits the learning process to be flexible, innovative and responsive to the individual learning needs of the Physical Therapist. There is therefore minimal prescription in this document as to how the required competencies should be achieved and evaluated. The onus is on the educational provider to demonstrate that their course produces OMT Physical Therapists who meet the stipulated competencies (and their constituent knowledge, skills and attributes), but allows them significant scope as to how they might achieve these outcomes. Such an approach recognises the resource, geographical and other challenges in providing OMT education internationally, but ensures a consistency of competency across the member nations of IFOMT and therefore establishes a minimum standard. (Appendix 2 provides some examples of the types of learning strategies and assessment tools which could be employed but is not intended to be prescriptive).

6.2 Development of the Competency Framework

The educational aims and objectives from the Educational Standards Part A (2000) document have been developed into the detailed competencies. This process of development reflects the IFOMT definition of OMT and has also integrated the feedback from Member Organisations to enable the competencies to reflect contemporary OMT practice for 2008 onwards.

6.3 Components of the Competency Framework

The competency framework details the following components:

Dimensions
The dimensions are the major functions for performance at Post Graduate level in OMT. The dimensions reflect the definition and scope of OMT practice as detailed in Sections 4 and 5 of this document.

Competencies
The competencies are the components of each dimension stated as a performance outcome. Overall, the competencies linked to a dimension indicate the standardised requirements to enable a Physical Therapist to demonstrate each major function for performance at Post Graduate level in OMT.

Competencies are divided into competencies related to **knowledge**, **skills** and **attributes**.

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

Skills encompasses the cognitive, psychomotor and social skills needed to carry out pre-determined actions.

Attributes encompasses the personal qualities, characteristics and behaviour in relation to the environment.

7. DIMENSIONS OF OMT

(There is no priority inferred in the order of listing the Dimensions).

Dimension 1: Demonstration of critical and evaluative evidence based practice

Dimension 2: Demonstration of critical use of a comprehensive knowledge base of the biomedical sciences in the speciality of OMT

Dimension 3: Demonstration of critical use of a comprehensive knowledge base of the clinical sciences in the speciality of OMT

Dimension 4: Demonstration of critical use of a comprehensive knowledge base of the behavioural sciences in the speciality of OMT

Dimension 5: Demonstration of critical use of a comprehensive knowledge base of OMT

Dimension 6: Demonstration of critical and an advanced level of clinical reasoning skills enabling effective assessment and management of patients with NMS disorders

Dimension 7: Demonstration of an advanced level of communication skills enabling effective assessment and management of patients with NMS disorders

Dimension 8: Demonstration of an advanced level of practical skills with sensitivity and specificity of handling, enabling effective assessment and management of patients with NMS disorders

Dimension 9 Demonstration of a critical understanding and application of the process of research

Dimension 10 Demonstration of clinical expertise and continued professional commitment to the development of OMT practice

8. COMPETENCIES IN OMT

8.1 Dimension 1

Dimension 1	**Demonstration of critical and evaluative evidence based practice**
Competencies Relating to Knowledge	
Competency D1.K1	Demonstrate critical and evaluative application of evidence based practices relevant to the field of OMT
Competency D1.K2	Demonstrate evaluative understanding of appropriate outcome measures
Competencies Relating to Skills	
Competency D1.S1	Demonstrate ability to retrieve, integrate and apply knowledge from the clinical, medical and behavioural sciences in the clinical setting, recognising the limitations of incorporating evidence into practice
Competency D1.S2	Demonstrate ability to critically review the recent literature of the basic and applied sciences relevant to NMS dysfunction, to draw inferences for OMT practice and present material logically in both verbal and written forms
Competency D1.S3	Demonstrate an evidence based approach to the assessment and management of patients with NMS dysfunctions
Competency D1.S4	Demonstrate the ability to evaluate the results of treatment accurately and modify and progress treatment as required using evidence
Competency D1.S5	Demonstrate the use of outcome measures to evaluate the effectiveness of OMT
Competency D1.S6	Demonstrate an ability to integrate and apply evidenced based approaches in the presentation of health promotion and preventative care programmes
Competency D1.S7	Demonstrate an ability to enhance and promote the rights of a patient to actively participate in their health care management by taking into consideration the patient’s wishes, goals, attitudes, beliefs and circumstances
Competencies Relating to Attributes	
Competency D1.A1	Demonstrate a critical and evaluative approach to all aspects of practice

8.2 Dimension 2

Dimension 2	**Demonstration of critical use of a comprehensive knowledge base of the biomedical sciences in the speciality of OMT**
Competencies Relating to Knowledge	
Competency D2.K1	Demonstrate comprehensive knowledge of anatomy of the musculoskeletal, neurological, vascular and lymphatic systems to enable evaluation of normal and abnormal function
Competency D2.K2	Demonstrate comprehensive knowledge of physiology of the musculoskeletal, neurological, vascular and lymphatic systems to enable evaluation of normal and abnormal function
Competency D2.K3	Demonstrate comprehensive knowledge of biomechanical properties of visco-elastic tissues to enable evaluation of normal and abnormal function
Competency D2.K4	Demonstrate comprehensive knowledge of pathology and pathogenesis of mechanical dysfunction of the NMS system
Competency D2.K5	Demonstrate comprehensive knowledge of non-mechanical dysfunction of the NMS system
Competency D2.K6	Demonstrate comprehensive knowledge of neurological dysfunctions of the NMS system
Competency D2.K7	Demonstrate comprehensive knowledge of internal visceral dysfunction to differentiate from dysfunction of the NMS system
Competency D2.K8	Demonstrate comprehensive knowledge of cardio-vascular dysfunction to differentiate from dysfunction of the NMS system
Competency D2.K9	Demonstrate comprehensive knowledge of dental and orthodontic dysfunctions related to the NMS system
Competency D2.K10	Demonstrate comprehensive knowledge of pain sciences related to the NMS system
Competency D2.K11	Demonstrate comprehensive knowledge of examination procedures to enable differential diagnosis of NMS, neurological, vascular and lymphatic dysfunction
Competency D2.K12	Demonstrate comprehensive knowledge of indications, contraindications, effects and side-effects of therapeutic drugs related to the examination and management of mechanical and non-mechanical NMS dysfunction
Competency D2.K13	Demonstrate comprehensive knowledge of indications for and the nature of surgical intervention in the management of NMS dysfunction
Competencies Relating to Skills	
Competency D2.S1	Demonstrate application of comprehensive knowledge of the biomedical sciences in the examination and management of patients with NMS dysfunction
Competency D2.S2	Demonstrate critical evaluation of the contribution of the biomedical sciences to the patient’s presentation

Competency D2.S3	Demonstrate effective interpersonal and communication skills in the application of knowledge of biomedical sciences in the examination and management of patients with NMS dysfunction
Competencies Relating to Attributes	
Competency D2.A1	Demonstrate adaptability of comprehensive knowledge of biomedical sciences in the context of patient-centred practice
Competency D2.A2	Demonstrate criticality of practice in the application of knowledge of biomedical sciences in the examination and management of patients with NMS dysfunction
Competency D2.A3	Demonstrate creativity and innovation in the application of knowledge of biomedical sciences in the examination and management of patients with NMS dysfunction

8.3 Dimension 3

Dimension 3	**Demonstration of critical use of a comprehensive knowledge base of the clinical sciences in the speciality of OMT**
Competencies Relating to Knowledge	
Competency D3.K1	Demonstrate comprehensive knowledge of the relevant clinical sciences as applied to OMT such as clinical anatomy, physiology, biomechanics and epidemiology in OMT assessment and management
Competency D3.K2	Demonstrate comprehensive knowledge of effectiveness, risks, and efficacy of OMT interventions
Competency D3.K3	Demonstrate comprehensive knowledge of the specific diagnostic and evaluative qualities of assessment tools, including: reliability, validity, sensitivity, specificity, positive likelihood, negative likelihood, and diagnostic accuracy
Competency D3.K4	Demonstrate comprehensive knowledge of prognostic, risk, and predictive factors of relevant health problems in relation to OMT management strategies
Competencies Relating to Skills	
Competency D3.S1	Demonstrate the ability to identify the nature and extent of patients' functional abilities, pain and multidimensional needs in relation to the ICF classification and planned OMT management
Competency D3.S2	Demonstrate the ability to determine which assessment and intervention tools are most appropriate and to interpret outcomes
Competency D3.S3	Demonstrate accurate prediction of expected changes and progress towards realistic outcomes
Competency D3.S4	Demonstrate effective interpersonal skills to inform the patient about the risks, prognosis, potential side effects, and likely benefits of an OMT treatment intervention
Competencies Relating to Attributes	
Competency D3.A1	Demonstrate an objective and analytical attitude in the application of knowledge of the clinical sciences

8.4 Dimension 4

Dimension 4	**Demonstration of critical use of a comprehensive knowledge base of the behavioural sciences in the speciality of OMT**
Competencies Relating to Knowledge	
Competency D4.K1	Demonstrate comprehensive knowledge of the relevant theories on behaviour and changes of behaviour, such as behavioural reactions to pain and limitations, coping strategies etc relevant to OMT assessment and management
Competency D4.K2	Demonstrate comprehensive knowledge of behaviour related processes that could be relevant during management of a patient
Competency D4.K3	Demonstrate comprehensive knowledge of the specific indications, diagnostic tools and interventions based on behavioural principles
Competency D4.K4	Demonstrate comprehensive knowledge of the role of the biopsychosocial model in relation to OMT, for example multidisciplinary management strategies
Competency D4.K5	Demonstrate comprehensive knowledge of the influence of the OMT Physical Therapist's behaviour on a patient's behaviour and vice versa
Competencies Relating to Skills	
Competency D4.S1	Demonstrate effective application of aspects of behavioural principles in assessment and management of patients
Competency D4.S2	Demonstrate effective communication skills when applying behavioural principles
Competency D4.S3	Demonstrate effective implementation of the biopsychosocial model in OMT management
Competency D4.S4	Demonstrate effective use of sufficient outcomes to evaluate the clinical behavioural aspects, for example, fear of movement
Competencies Relating to Attributes	
Competency D4.A1	Demonstrate sensitivity to changes in patient behaviour.
Competency D4.A2	Demonstrate reflection and self evaluation in managing patients
Competency D4.A3	Demonstrate application of biopsychosocial principles in OMT management

8.5 Dimension 5

Dimension 5	Demonstration of critical use of a comprehensive knowledge base of OMT
Competencies Relating to Knowledge	
Competency D5.K1	Demonstrate comprehensive knowledge of the interrelationship of the NMS structures in normal function and NMS dysfunction
Competency D5.K2	Demonstrate comprehensive knowledge of the theoretical basis of the assessment of the NMS system and interpretation of this assessment towards a clinical physical diagnosis
Competency D5.K3	Demonstrate comprehensive knowledge of static, dynamic, and functional posture in the assessment of the NMS system and interpretation of this assessment
Competency D5.K4	Demonstrate comprehensive knowledge of the biomechanics and principles of active and passive movements of the articular system including the joint surfaces, ligaments, joint capsules and associated bursae in the assessment of the NMS system and interpretation of this assessment
Competency D5.K5	Demonstrate comprehensive knowledge of the specific tests for functional status of the muscular system in the assessment of the NMS system and interpretation of this assessment
Competency D5.K6	Demonstrate comprehensive knowledge of the specific tests for the function and dynamic mobility of the nervous system in the assessment of the NMS system and interpretation of this assessment
Competency D5.K7	Demonstrate comprehensive knowledge of the specific tests for functional status of the vascular system in the assessment of the NMS system and interpretation of this assessment
Competency D5.K8	Demonstrate comprehensive knowledge of the specific special/screening tests for the safe practice of OMT in the assessment of the NMS system and interpretation of this assessment
Competency D5.K9	Demonstrate comprehensive knowledge of appropriate medical diagnostic tests and their integration required to make a NMS clinical physical diagnosis
Competency D5.K10	Demonstrate comprehensive knowledge of possible interventions for management of NMS dysfunction
Competency D5.K11	Demonstrate comprehensive knowledge of multimodal Physical Therapy intervention for management of NMS dysfunction
Competency D5.K12	Demonstrate comprehensive knowledge of the Physical Therapy theory of manipulative therapy practice in the management of NMS dysfunctions
Competency D5.K13	Demonstrate comprehensive knowledge of various manipulative therapy approaches including those in medicine, osteopathy and chiropractic
Competency D5.K14	Demonstrate comprehensive knowledge of the indications and contra-indications for OMT Physical Therapy interventions used in the management of NMS dysfunction

Competency D5.K15	Demonstrate comprehensive knowledge of safety / screening tests appropriate to the choice of management interventions in NMS dysfunction
Competency D5.K16	Demonstrate comprehensive knowledge of evidence based outcome measures appropriate to the management of NMS dysfunction
Competency D5.K17	Demonstrate comprehensive knowledge of appropriate ergonomic strategies and advice to assist the patient to function effectively in their work environment
Competency D5.K18	Demonstrate comprehensive knowledge of preventative programmes for NMS dysfunctions
Competencies Relating to Skills	
Competency D5.S1	Demonstrate application of comprehensive knowledge of OMT in the examination and management of patients with NMS dysfunction
Competency D5.S2	Demonstrate accurate clinical physical diagnosis of NMS dysfunctions
Competency D5.S3	Demonstrate critical evaluation of the contribution of the OMT knowledge to the examination and management of the patient with NMS dysfunction
Competency D5.S4	Demonstrate integration of principles of mobilisation and manipulation as a component of multimodal OMT Physical Therapy management
Competency D5.S5	Demonstrate integration of principles of exercise physiology as it applies to therapeutic rehabilitation exercise programmes as a component of multimodal OMT Physical Therapy intervention for management of NMS dysfunction
Competency D5.S6	Demonstrate integration of principles of motor-learning as a component of multimodal OMT Physical Therapy intervention for management of NMS dysfunction
Competency D5.S7	Demonstrate integration of principles of patient education as a component of multimodal OMT Physical Therapy intervention for management of NMS dysfunction
Competency D5.S8	Demonstrate integration of principles of other modalities (such as taping, bracing, electrophysical modalities, acupuncture / needling) as a component of multimodal OMT Physical Therapy intervention for management of NMS dysfunction
Competency D5.S9	Demonstrate advanced use of interpersonal and communication skills in effective application of OMT during the patient history, physical examination, reassessment of patients, patient management and in all documentation
Competencies Relating to Attributes	
Competency D5.A1	Demonstrate adaptability of knowledge of OMT in the context of patient centred practice
Competency D5.A2	Demonstrate criticality of evidence based practice in the application of knowledge of OMT
Competency D5.A3	Demonstrate creativity and innovation in the application of knowledge of OMT.

8.6 Dimension 6

Dimension 6	**Demonstration of critical and an advanced level of clinical reasoning skills enabling effective assessment and management of patients with NMS dysfunctions**
Competencies Relating to Knowledge	
Competency D6.K1	Demonstrate critical understanding of the process of hypothetico-deductive clinical reasoning, including hypothesis generation and testing
Competency D6.K2	Demonstrate effective use of the process of pattern recognition, including the importance of organising clinical knowledge in patterns
Competency D6.K3	Demonstrate critical application of the various categories of hypotheses used in OMT, including those related to diagnosis, treatment and prognosis
Competency D6.K4	Demonstrate effective recognition of dysfunction requiring further investigation and / or referral to another healthcare professional
Competency D6.K5	Demonstrate critical evaluation of common clinical reasoning errors
Competencies Relating to Skills	
Competency D6.S1	Demonstrate accurate and efficient selection of inquiry strategies based on early recognition and correct interpretation of relevant clinical cues
Competency D6.S2	Demonstrate critical and evaluative collection of clinical data to ensure reliability and validity of data
Competency D6.S3	Demonstrate advanced use of clinical reasoning to integrate scientific evidence, clinical data, the patient's perceptions and goals, and factors related to the clinical context and the patient's individual circumstances
Competency D6.S4	Demonstrate integration of evidence based practice and experiential reflective practice in clinical decision making
Competency D6.S5	Demonstrate application of collaborative clinical reasoning with the patient, carers / care-givers and other health professionals in determining management goals, interventions and measurable outcomes
Competency D6.S6	Demonstrate effective prioritisation in the examination and management of patients with NMS dysfunction
Competency D6.S7	Demonstrate effective use of metacognition in the monitoring and development of clinical reasoning skills
Competencies Relating to Attributes	
Competency D6.A1	Demonstrate patient-centred clinical reasoning in all aspects of clinical practice
Competency D6.A2	Demonstrate critical understanding of the key role of clinical reasoning skills in the development of clinical expertise

Competency D6.A3	Demonstrate effective collaborative and communication skills in requesting further investigation or referral to another healthcare professional
Competency D6.A4	Demonstrate learning through critical reflection during and after the clinical encounter
Competency D6.A5	Demonstrate learning through precise and timely reassessment

8.7 Dimension 7

Dimension 7	**Demonstration of an advanced level of communication skills enabling effective assessment and management of patients with NMS dysfunctions**
Competencies Relating to Knowledge	
Competency D7.K1	Demonstrate critical understanding of the processes of verbal communication
Competency D7.K2	Demonstrate critical understanding of the processes of non verbal communication
Competency D7.K3	Demonstrate critical understanding of the processes of written communication and record keeping
Competency D7.K4	Demonstrate critical awareness of common errors of communication e.g. use of inappropriate closed questions
Competencies Relating to Skills	
Competency D7.S1	Demonstrate efficient and effective questioning strategies to obtain reliable and valid data from the patient
Competency D7.S2	Demonstrate efficient and effective use of active listening skills throughout the patient encounter
Competency D7.S3	Demonstrate effective explanation to the patient of their individual presentation and their management options
Competency D7.S4	Demonstrate effective collaboration with the patient to inform management decisions
Competency D7.S5	Demonstrate a high level of skill in implementing and instructing patients in appropriate therapeutic rehabilitation exercise programmes
Competency D7.S6	Demonstrate effective documentation of informed consent from the patient for assessment and management procedures as appropriate
Competency D7.S7	Demonstrate maintenance of clear, accurate and effective records of patient assessment and management to meet medical and legal requirements
Competencies Relating to Attributes	
Competency D7.A1	Demonstrate critical awareness of patient-centred communication as being central to effective clinical practice
Competency D7.A2	Demonstrate critical awareness of the central role of communication skills in the development of clinical expertise
Competency D7.A3	Demonstrate critical awareness of the promotion of wellness and prevention through the education of patients, carers / care-givers, the public and healthcare professionals
Competency D7.A4	Demonstrate empathy in the application of communication skills

8.8 Dimension 8

Dimension 8	**Demonstration of an advanced level of practical skills with sensitivity and specificity of handling, enabling effective assessment and management of patients with NMS dysfunctions**
Competencies Relating to Knowledge	
Competency D8.K1	Demonstrate application of knowledge of indications for practical skills
Competency D8.K2	Demonstrate application of knowledge of contraindications for practical skills
Competency D8.K3	Demonstrate integration of knowledge and clinical reasoning in the decision to perform practical skills
Competency D8.K4	Demonstrate integration of knowledge and clinical reasoning in the evaluation of clinical data obtained
Competency D8.K5	Demonstrate integration of knowledge and clinical reasoning in the progression of OMT techniques and management
Competency D8.K6	Demonstrate critical understanding of other interventions and modalities, for example, taping, needling, and electrophysical modalities to enhance rehabilitation of NMS dysfunction
Competencies Relating to Skills	
Competency D8.S1	Demonstrate sensitivity and specificity of handling in the analysis of static and dynamic posture
Competency D8.S2	Demonstrate sensitivity and specificity of handling in the clinical examination of the articular system
Competency D8.S3	Demonstrate sensitivity and specificity of handling in the clinical examination of the nervous system
Competency D8.S4	Demonstrate sensitivity and specificity of handling in the clinical examination of the muscular and fascial systems
Competency D8.S5	Demonstrate sensitivity and specificity of handling in the application of any special tests for the safe practice of OMT, for example cervical artery screening
Competency D8.S6	Demonstrate sensitivity and specificity of handling in the application of a broad range of OMT techniques
Competency D8.S7	Demonstrate sensitivity and specificity of handling in the performance of low velocity, rhythmical, passive movements (mobilisation) and high velocity, small amplitude passive movements with impulse (manipulation)
Competency D8.S8	Demonstrate sensitivity and specificity of handling in the performance of manual and other Physical Therapy techniques to treat the articular, muscular, neural, and fascial systems

Competency D8.S9	Demonstrate sensitivity and specificity of handling in the implementation and instruction of patients in appropriate therapeutic rehabilitation exercise programmes
Competency D8.S10	Demonstrate advanced use of interpersonal and communication skills in the effective application of practical skills
Competencies Relating to Attributes	
Competency D8.A1	Demonstrate adaptability of practical skills in the context of patient centred practice
Competency D8.A2	Demonstrate criticality of practice in the application of practical skills
Competency D8.A3	Demonstrate creativity and innovation in the application of practical skills

8.9 Dimension 9

Dimension 9	Demonstration of a critical understanding and application of the process of research
Competencies Relating to Knowledge	
Competency D9.K1	Demonstrate critical understanding of common quantitative research designs, including strengths and weaknesses
Competency D9.K2	Demonstrate critical understanding of common qualitative research designs, including strengths and weaknesses
Competency D9.K3	Demonstrate critical evaluation of ethical considerations relating to human research
Competencies Relating to Skills	
Competency D9.S1	Demonstrate effective critical appraisal of research relevant to OMT Physical Therapy practice as it relates to NMS dysfunction
Competency D9.S2	Demonstrate generation of a research question based on a critical evaluation of the current literature relevant to OMT Physical Therapy practice and relating to NMS dysfunction
Competency D9.S3	Demonstrate development of a research proposal which meets the requirements of a human ethics committee as appropriate
Competency D9.S4	Demonstrate selection and application of appropriate data analysis procedures
Competency D9.S5	Demonstrate effective execution of a research project and dissemination of its conclusions*
Competencies Relating to Attributes	
Competency D9.A1	Demonstrate appreciation of the need for the development of further evidence in OMT Physical Therapy practice through research
Competency D9.A2	Demonstrate critical awareness of the role of research in advancing the body of knowledge in OMT Physical Therapy

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

8.10 Dimension 10

Dimension 10	Demonstration of clinical expertise and continued professional commitment to the development of OMT practice
Competencies Relating to Knowledge	
Competency D10.K1	Demonstrate effective integration of comprehensive knowledge, cognitive and metacognitive proficiency
Competency D10.K2	Demonstrate advanced knowledge of current best evidence in OMT theories, as well as diagnostic, prognostic and intervention techniques
Competency D10.K3	Demonstrate an understanding of advanced knowledge of OMT based on current and classic literature
Competency D10.K4	Demonstrate scholarly contribution to the body of OMT knowledge, skills and measurement of outcomes
Competency D10.K5	Demonstrate efficiency in utilising cues and recognising patterns of NMS dysfunction
Competencies Relating to Skills	
Competency D10.S1	Demonstrate ability to combine the evidence, knowledge, skills, other clinical applications, patient preferences, circumstances and environmental situations in determining an OMT intervention
Competency D10.S2	Demonstrate effective continued direct patient care
Competency D10.S3	Demonstrate effective and efficient communication and interpersonal skills involving the patient and others in decision making
Competency D10.S4	Demonstrate ability to solve problems with accuracy and precision
Competency D10.S5	Demonstrate ability to employ lateral thinking to generate new hypotheses or techniques to produce a positive outcome or plan of care
Competency D10.S6	Demonstrate sound professional judgements when selecting assessment and treatment techniques, evaluating benefit and risk
Competency D10.S7	Demonstrate ability to simultaneously monitor multiple dimensions of data during patient contact while maintaining a professional but relaxed communication style
Competency D10.S8	Demonstrate efficient and effective use of a variety of techniques that encompass the breadth of OMT
Competency D10.S9	Demonstrate efficiency and effectiveness in the practice of OMT in the clinical setting
Competency D10.S10	Demonstrate a patient-centred approach to practice, responding and rapidly adapting the assessment and intervention to the emerging data and the patient's perspective

Competency D10.S11	Demonstrate efficient and effective use of OMT within one episode of care with patients with multiple inter-related or separate dysfunctions and / or co-morbidities
Competency D10.S12	Demonstrate ability to skilfully consult with peers, other professionals, legislative and regulatory organisations as appropriate
Competencies Relating to Attributes	
Competency D10.A1	Demonstrate professional, ethical and autonomous practice
Competency D10.A2	Demonstrate a commitment to life-long learning with continuous educational development
Competency D10.A3	Demonstrate a commitment to contributing to the professional development of OMTs through teaching and mentoring
Competency D10.A4	Demonstrate a commitment to professional service to the profession and community to assist in the advancement of the OMT profession and to the benefit of the public
Competency D10.A5	Demonstrate sound professional judgement, empathy and cultural competence in all patient interactions

9. ACRONYMS AND SYNONYMOUS TERMS

9.1 ACRONYMS

EBP	Evidence based practice/ Evidence based procedures
ICF	International Classification of Functioning, Disability and Health www.who.int/classifications/icf
IFOMT	International Federation of Orthopaedic Manipulative Therapists www.ifomt.org
MO	Member Organisation (of IFOMT)
NMS	Neuromusculoskeletal
OMT	Orthopaedic manipulative therapy/ Orthopaedic manual therapy
RIG	Registered Interest Group (of IFOMT)
WCPT	World Confederation for Physical Therapy www.wcpt.org
WHO	World Health Organization www.who.int

9.2 SYNONYMOUS TERMS

- Clinical reasoning / clinical decision making / clinical problem solving / clinical judgement
- Manipulation / grade V mobilisation / thrust manipulation / thrust / HVLAT / mobilisation with impulse
- Mobilisation / mobilization
- Patient / client
- Physiotherapist / Physical Therapist
- Physiotherapy / Physical Therapy

10 REFERENCES

Haynes RB, Devereaux PJ, Guyatt GH (2002). Physicians' and patients' choices in evidence based practice, British Medical Journal, 324:1350-1351.

Higgs J, Jones M (2000). Clinical Reasoning in the Health Professions, 2nd edn, Oxford, Butterworth Heinemann.

IFOMT (2000). IFOMT Educational Standards Document.

APPENDICES

IFOMT EDUCATIONAL STANDARDS – A HISTORICAL PERSPECTIVE

The Educational Standards (Standards) of IFOMT extend the level of basic training received in OMT Physical Therapy undertaken in Physical Therapy training programmes so that OMT Physical Therapists attain an advanced standard of patient care.

Key stages in the development of IFOMT educational standards:

1974 IFOMT formed as a subgroup of the World Confederation for Physical Therapy

1975 Initial draft of Standards document developed and signed by Physical Therapists F.Kaltenborn, G.Grieve, D.Lamb and B. Edwards, June 30th 1975, Waynesburg, Pennsylvania, USA

1977 Standards document presented at the IFOMT meeting in Vail, USA

1978 Standards document ratification at the WCPT meeting, in Israel

1997 Standards Committee charged with reviewing the Standards Document, IFOMT General Meeting, Norway

2000 Standards document revision ratified in Perth, Australia

2001 Agreed plan to review the Standards document every 6 years, with feedback from Member Organisations and external assessors. IFOMT Strategic Meeting, Antwerp, Belgium

2004 Addition to the Standards document of “Part B, International Monitoring Document” following acceptance of the document at the General Meeting, Cape Town, South Africa

2005 Questionnaires to Member Organisations for feedback on the Standards Document to commence the 6 yearly review process

2008 Educational Standards Document revision presented at IFOMT meeting, Rotterdam, The Netherlands

The Standards Document continues to be used as an active guide in the membership process and is easily available on the IFOMT web site.

The document has changed from being a 3-page outline of manual therapy approaches to a much longer and comprehensive document describing educational standards, scope of OMT practice, guidelines for formulating programmes and methods for measuring competency.

The following is taken verbatim from “Submission of Standards Committee”, June 30th 1975, Pennsylvania, USA

International Federation of Manipulative Therapists
Waynesburg, Pennsylvania

June 30 1975

Submission of Standards Committee

The following represents the submission of the Standards Committee of IFOMT of the theoretical, practical, and clinical material which should be considered as a desirable minimum in training manual/manipulative therapists. This presentation is forwarded to the executive for consideration prior to onward transmission to the voting members the Federation.

All members of the committee would like to express thanks to Mr. Gregory Grieve for the material enclosed under the theoretical section; this comprehensive compilation is entirely his work.

The submission is presented under the following headings:
1. Definition of Name, Standards, and Ethics
2. Theoretical outline with annotated bibliography
3. Practical outline including comments on examinations

It is hoped that this may be used as a guideline to assist in setting up new courses of training or improve existing courses.

The Standards Committee feel that fulltime training with supervised clinical work is vital in the long term development of successful manual therapy training. Training based on attendance on a number of short courses must only be considered as an interim measure although the committee realize that many therapists are receiving clinical instruction in the employing departments.

The Standards Committee recognize that a considerable variety of techniques exist which have to this time been considered belonging to various schools of thought, e.g., Mennell, Norwegian system, South Australian system, British system, osteopathic, chiropractic, etc. Presently considerable diffusion of ideas is taking place and modifications of all “systems” is occurring.

With this in mind the Standards Committee feel that agreement can be reached if guidelines are produced stating broad principles. It is considered desirable however that training systems in various countries make themselves aware of the work of all contributors in this field.

As stated in the “Definition of Name” actual mobilisation techniques are an addition to the available treatments appropriate for neuromusculokeletal dysfunctions. This section the presentation will be concerned with principles related to the application of passive movement only, but it in no way infers exclusion of other appropriate techniques.

The Standards Committee feel that the following guidelines should be followed:

1. Thorough understanding of basic examinative techniques for determining neuromusculokeletal dysfunctions e.g., comprehensive examination for neck and upper limb.
2. Palpatory skills must be developed so that:
    a. Reactivity of the local problem can be determined from point of view of recognising muscle spasm
    b. Applying pressures, gliding and distraction procedures to articular structures to determine the pain/range/resistance relationship e.g., “end feel”.
3. Techniques for passive testing of specific joint movement should be included so that hypermobility, hypomobility and possible positional faults may be recognized.
4. The meaning of graded passive movement should be included so that the appropriate degree of movement can be applied to the joint related to pain/limitation/resistance relationship.

5. Techniques of semispecific mobilisation. The teaching of passive movement techniques for therapeutic purposes could conveniently follow the plan below. Learning techniques on peripheral joints prior to vertebral joints would seem a logical sequence

a. (semispecific mobilisation to enable ares of the spine, e.g., thoracocervical or peripheral joint complexes e.g. radiocarpal joint to be moved in appropriate directions.
b. This could be followed by specific mobilisation techniques so that movement in a required direction may be applied to a dysfunctional mobile segment without applying unwanted stress to neighbouring areas. This would include the principles of so called locking related to physiological combinations of movement.

Manipulation should not be taught until a thorough understanding of the principles of mobilistion has been achieved and competence in application of specific mobilisation obtained.

The committee feel that supervised clinical work is an essential part of the training scheme and that the value of training is considerably reduced without such clinical work.

Proof of competence by examination is essential, Such examination should be based on knowledge of broad principles set out previously:

1. Broad, basic science principles underlying use of manual therapy
2. Principles directly related to mobilisation therapy, e.g., recognition of X ray features, contraindications to manipulation, etc,
3. Examination of a patient or patients
4. Demonstration of techniques both spinal and peripheral on a model &/or patients
5. Presentation of examples of case work performed by therapist
6. Demonstration of knowledge obtained from wide reading of available literature

Respectfully submitted,
F. Kaltenborn
G. Grieve
B. Edwards
D.W. Lamb

OFFICERS. RICHARD E. ERHARD, PRESIDENT,
PETER EDGELOW, SECRETARY TREASURER,
EXECUTIVE MEMBERS: NEW ZEALAND - NORWAY - UNITED KINGDOM
STANDARDS COMMITTEE: FREDERICK M. KALTENBORN, CHAIRMAN, GREGORY P. GRIEVE, CO-CHAIRMAN – THEORY, DAVID LAMB, BRIAN EDWARDS

Excerpts from Standards Document (1996)

The following section is taken from the IFOMT Educational Standards (1996, page 20) with minor clarification in italics.

An IFOMT educational curriculum referred to as the "Standards" has been effective since ratification in Israel in 1979. Since that time, the document has been reviewed and modified in keeping with the growth and development of OMT.

The original educational standards of IFOMT were the result of deliberations of the standards committee which comprised of *(the following physiotherapists)*:

Mr. Freddy Kaltenborn (Norway) – Chairman, Mr. Brian Edwards (Australia),
Mr. Gregory P. Grieve (U K), Mr. David W. Lamb (Canada)

At that time the committee acknowledged the particular contribution made in formulating:
(i) The theoretical syllabus which was based on the presentation (with minor alterations) by Mr. G.P. Grieve. This included an annotated bibliography. This was based on the UK system.
(ii) The practical syllabus which was based on the presentation of Mr. B. Edwards. This was based on the Australian system.

The original standards committee was replaced by the educational consultants which comprised: Mr. David W. Lamb (Canada) – chair, Mr. Freddy Kaltenborn (Norway) Mr. Geoffrey D. Maitland (Australia). This group modified the original standards in minor ways largely to clarify and emphasize meaning.

From the outset there was recognition of the considerable variety of approaches both in concept and technique existing in countries practising orthopaedic manipulative (manual) therapy – OMT. These were, variously named after the originator, the country of origin, or professional organization i.e. Cyriax, Menriell, Norwegian system, South Australian system, osteopathic, chiropractic etc. A considerable amount of common ground existed and diffusion had occurred through courses and the reading of a variety of technical journals devoted to OMT produced by the various groups.

The standards committee felt considerable agreement could be reached if the guidelines stated broad principles and avoided a partisan approach. It was considered essential that various countries' OMT groups make themselves aware of the work of all contributors in the field. Recognizing the importance of the different approaches reflects the depth of experience and increasing body of knowledge in manual therapy.

At the IFOMT meeting in Gran Canaria Spain, 1990, the IFOMT Membership Committee was formed. This internationally representative committee was given a mandate to review the educational standards for membership and to review and process applications for membership of IFOMT.

This committee has continued the process of updating the IFOMT Stanadrds and reformatted the educational standards document upholding the principles of IFOMT standards of education and training.

Members of the Education Standards Committee (1996): G. Jull (chair); D. Kettle (UK), A Leung (Hong Kong), D. Wallin (Sweden), J. Poole (The Netherlands), A. Porter Hoke (US).

GUIDELINES FOR FORMULATING ORTHOPAEDIC MANIPULATIVE THERAPY (OMT) PROGRAMMES

It is recognised that different countries have varying approaches to the development and delivery of OMT programmes depending on their educational systems, and these differences are valued by IFOMT. However, in order to ensure that the IFOMT standards are met and the competencies are attained the following guidelines are provided to assist countries when formulating OMT programmes.

All programmes should be underpinned with sound clinical reasoning, evidence of reflective practices, evaluation of the evidence base, and the learning and application of higher level manual therapy skills, integrated with the principles of adult learning theory. All programmes should incorporate clinical mentorship as this is vital for the long term development of OMT knowledge and skills. The opportunity for students to attend programmes in a higher education environment is the ideal. However alternative pathways can be offered provided countries can demonstrate that their programmes meet the IFOMT Standards. Countries wishing to develop programmes are strongly recommended to seek advice from the Standards Committee at the early stages of the development of the programme.

This Standards Document provides a framework for establishing an OMT curriculum at Post Graduate level. Evaluation of a curriculum submitted to IFOMT for approval or being evaluated as continuing to meet IFOMT Standards through International Monitoring necessitates mapping of the curriculum to the competencies detailed in this document to inform theoretical and clinical learning outcomes. In addition, curricula must demonstrate how the competencies are assessed as being achieved. The detailing of dimensions and competencies in this document will also enable the processes of self evaluation and self monitoring of ongoing standards of curricula by Member Organisations.

Theoretical Knowledge and Practical Skills

Comprehensive theoretical knowledge is required in the biomedical, clinical and behavioural sciences, and the speciality of OMT for the development of advanced level skills in clinical physical diagnosis and clinical management. Programmes should include a variety of teaching approaches and learning strategies and this may include elements of online and electronic learning activities, in addition to face to face activities. Learning and teaching methods that promote and extend students' skills in assessment and management of patients are required. This includes advanced handling skills, clinical reasoning, differential diagnosis, problem solving and reflection as these skills will enhance the students' performance in clinical practice. Theoretical knowledge and learning of practical skills can be effectively integrated. This assists students' understanding of the relevance of the theory and helps them to integrate and apply it to their clinical practice.

The examination and management skills developed by students should demonstrate a holistic approach reflecting their understanding of the inter-related nature of the NMS systems in NMS dysfunctions and the need to rehabilitate the whole patient for functional recovery.

The learning of manual skills in OMT must also emphasise the development of students' communication skills to prepare them for clinical practice. The principles and practices of evidence based procedures and measurement of outcomes must also be embodied in the programme of learning.

Examination skills must be developed so that students can display competency in both the patient history and physical examination, and throughout the management and re-evaluation of the articular, neural, muscular systems, and other systems as appropriate

It is expected that OMT educational programmes will contain a **minimum** of 200 direct contact hours of theoretical learning and a **minimum** of 150 direct contact hours will be spent in the

learning of practical skills in OMT. These hours do not equate to a minimum competency level but reflect the number of contact learning hours normally required to encompass the curriculum and achieve the defined competencies based upon the experience of IFOMT to date.

It is recognised that the nature of the direct contact learning hours will vary depending on the different contexts of education in different Member Organisations of IFOMT. In addition to these contact learning hours, it is anticipated that students will undertake Self Directed Practice in all areas of the defined competencies.

The direct contact learning hours can be delivered through a variety of teaching and learning strategies to enable students to achieve the defined competencies, including:

- Problem based learning
- Lectures
- Student seminar presentations
- Discussion and debates
- Case analysis
- Patient demonstrations / analysis
- Supervised techniques practice
- etc

Mentored Clinical Practice

Mentored clinical practice is an essential part of the OMT educational programme. Mentored clinical practice as required in the IFOMT Educational Standards is the examination and management of patients by the student under the mentorship of an OMT Clinical Mentor who is a Member of the Member Organisation of IFOMT. The OMT Clinical Mentor should not be treating their own patients in the times dedicated for the mentorship of students. A variety of models of clinical mentorship may be used depending upon the particular issues and resources within an individual country.

Students must have the verbal communication and language skills to communicate effectively with the patient to maximise the opportunities to develop clinical reasoning skills.

It is recommended that a **minimum** of 150 hours of Mentored Clinical Practice should normally be undertaken by students. This is ideally distributed throughout the course of theoretical and practical skills learning to give students the maximum opportunity to develop their clinical skills. These hours do not equate to a minimum competency level but reflect the number of hours normally required to encompass the curriculum and achieve the defined competencies. It is recognised that the nature of the Mentored Clinical Practice will vary depending upon the educational context of the individual Member Organisation.

Evaluation of Competency

Proof of competency by formal evaluation is mandatory and is based on the achievement of all of the dimensions and competencies set out in the Standards Document.
It is recommended that formal evaluation of students be undertaken through use of a variety of assessment tools, including:

- Theoretical assessments
    - For example, written examination, critical analysis of a case study, seminar presentation, reflective analysis etc
- Clinical examination and treatment of patients
    - For example, oral, practical, examination of a patient, re-evaluation and management of a returning patient etc
- Practical examinations of manual skills incorporating problem solving and clinical reasoning
    - For example, practical skills examination, Objective Structured Clinical Examination (OSCE) etc

GUIDELINES FOR COUNTRIES WITH LEGISLATION TO LIMIT THE PRACTICE OF MANIPULATION

The scope of practice of the OMT Physical Therapist includes the full range of OMT treatment procedures, including specific mobilisation and manipulation techniques applied to peripheral and spinal joints. Like all Physical Therapy assessment and treatment procedures, application of mobilisation and manipulation should be evidence-based and should follow a thorough examination including all indicated screening / safety tests for the appropriateness of treatment. The patient must have given informed consent prior to the treatment. It is recognised that manipulation is only a small part of a larger continuum of patient care offered by the OMT Physical Therapist. It would be rare that a patient would only undergo one form of treatment in a session (i.e. manipulation), as usual OMT Physical Therapy involves a continuum of care employing a multimodal approach to treatment based on the patient's individual examination / re-examination findings.

In the event that manipulation / HVLAT (high velocity low amplitude thrust techniques) applied to the spinal or peripheral joints of patients is prohibited by government legislation this would not preclude the OMT group of that country obtaining membership by ensuring that manipulation is taught and practised as part of the OMT educational programme. The principles of manipulation are the same for spinal and peripheral joints and therefore these manipulation principles and related techniques can be applied to peripheral joints. In the event that high velocity spinal manipulation techniques cannot be applied to patients with spinal problems, training in the theory and technique (as well as application of manipulation to the peripheral joints of patients) should be undertaken as this could be used to change government policy.

If a country states that there is a legal restriction to manipulation, the details of such legislation should be produced with application for membership.

JANUARY 2005

PART B

GUIDELINES

FOR

IFOMT
INTERNATIONAL MONITORING

OF

MEMBER ORGANISATIONS AND OMT PROGRAMMES

Background

As the international organisation representing orthopaedic manipulative physiotherapy (OMT), IFOMT is committed to the promotion and ongoing development of this area of clinical specialisation. A major function of IFOMT is to ensure the quality of postgraduate training in orthopaedic manipulative physiotherapy. The qualities of a programme that concern IFOMT relate to both generic and professional skills that are essential for the graduate to perform in the field of OMT.

The IFOMT Educational Standards document provides a detailed guide to the standards of education for postgraduate programmes that are considered acceptable to IFOMT. This process of IFOMT international monitoring, accepted at the AGM in Cape Town, March 2004 introduces a process to ensure that educational programmes accepted by IFOMT are satisfying these education standards and producing physiotherapists who are able to deliver a high standard of patient care in the area of orthopaedic manipulative physiotherapy.

The process will focus on the professional and generic skills identified in the IFOMT Educational Standards. IFOMT recognises the diversity in OMT programmes throughout the world. The process that has been formulated in this document is considered the most appropriate method for determining standards whilst allowing programmes to preserve their individuality.

The process for evaluation of educational standards to IFOMT will be administered and implemented by the Standards Committee of IFOMT. The committee members will independently review the submission from the Member Organisation (MO). Their recommendations will be collated by the Chair of the Standards Committee (SC) to be discussed at a planned meeting. Once a decision has been agreed, a report will be written making recommendation to the IFOMT Executive.

Educational standards

The quality of education has received increased attention in recent years, in particular through external factors reflecting the developing educational, political and economic contexts (Stuart, 1994). The nature of quality in education has been debated (Doherty, 1994), but there is agreement that improving quality needs to focus on learning, teaching and the establishment of an effective framework within which these activities can occur (Preedy et al, 1997). Quality can be considered as possessing two distinct components:

1. Quality assurance - related to 'feed-forward' mechanisms aimed at developing the ongoing quality of a course. This encompasses systems to determine strengths, weaknesses and problems (e.g. planning and running a course) and ensure that outcomes are achieved (i.e. matching aims and outcomes).

2. Quality control - related to 'feedback' mechanisms aimed at checking outcomes after the educational processes have occurred to identify strengths, weaknesses and problems (Preedy et al, 1997).

Most educational systems have typically placed emphasis on quality control of their output (Cuttance, 1997). This commonly takes the form of inspection or external examining and monitoring processes. For educational standards to be effective therefore, it can be argued that both quality components are important and that any model that aims to maintain educational standards should encompass both.

The model adopted here places emphasis on quality assurance for the individual courses and their working with the MO. In addition, quality control is central to the MO’s monitoring of standards, and this international monitoring by the SC of IFOMT.

International monitoring of existing member organisations

This document forms part of the Standards Document, so that new members will have a built in system for monitoring their educational programme. This is a quality control mechanism that will evaluate outcomes and progress. In addition it will take the MOs through a development process. Each MO will demonstrate achievement of the following processes through its mechanisms of quality control.

Process of monitoring for an existing MO:

1. Evaluation of an educational programme may take many different forms, ranging from verbal to more extensive written reports. There are guidelines regarding good practice in relation to programme structure and development (Appendix A). Each educational programme of an MO will demonstrate its processes of evaluation to the satisfaction of the MO.

2. An External Assessor will be appointed to each educational programme, who will work to the specifications of the guidelines, to look at the quality of the ongoing educational programme and the processes of programme evaluation that are already taking place. See guidelines for the criteria for External Assessors (Appendix B). The External Assessor must be independent of the course, to enable them to fulfil their role (Appendix C) e.g. Ann Moore who is based at the University of Brighton, is the External Assessor for the University of Birmingham educational programme in the UK (2004/5). The name and CV of the appointed External Assessor should be forwarded to the MO at the time of appointment to the programme, for the MO's endorsement of the quality and the impartiality of the appointed Assessor.
   The External Assessor has access to all material for example, programme documentation and student assessment, and specifically will observe the clinical assessment and sample the students' written assessments. This ensures quality but also continuous development of the educational programme. The External Assessor writes a report annually to the MO (Appendix D), indicating whether the educational programme is achieving its aims (and therefore the IFOMT standards).

3. The annual report goes to the MO for consideration. This is to ensure that the educational programme is of a standard to lead to membership to that MO. By implication, the educational programme will therefore meet IFOMT standards. The EA therefore monitors programmes for the MO on a yearly basis.

4. The IFOMT SC will receive the reports from the External Assessors and the minutes of the meetings at which the reports were considered by the MO, on a three yearly basis. The SC will consider the reports and report to the IFOMT Executive. The SC therefore monitors the working of the MO on a three yearly basis.

5. Any submission of a new educational programme within the country of an existing MO, would need to be submitted to the MO for scrutiny and will then go through the process described in points 1-4 on an annual basis. Guidelines for the evaluation of new programmes are provided (Appendix E).

Cost of the process of monitoring:

The costing of this process will be dependent on travel costs. In the UK, for example, there is a flat fee for the year's activity, which is ~£250.00 for an External Assessor. The payment is made on the submission of the written report. Any incurred travel costs will be in addition to the flat fee. The advantage of having an external person is that in the report there will inevitably be suggestions of development. If it is not possible to appoint an External Assessor from the MO's own country, then it is possible to seek an Assessor from a different country. Bringing someone in from another MO country may further benefit any development. The overall cost should not be prohibitive to the process, and will be an investment for the MO. The IFOMT resource centre has a list of names from MOs of appropriate people to fulfil the role of External Assessor.

International monitoring for incoming manual therapy groups.

The above process will need to be established in the developing stages of new Manual Therapy groups and educational programmes as a prerequisite for membership to IFOMT. This document will be incorporated into the present Standards Document, as an additional requirement for membership as of January 2005.

Requirements from member organisations

(All documentation must be submitted in English)

1. Title page, to include:
- Name of Member Organisation
- Contact person
- Role of Contact Person within Member Organisation
- Address
- Telephone
- Fax
- Email address
- Date of submission

2. Overview of MO process of monitoring educational standards. Maximum of 2000 words To include details of all educational programmes recognised as providing membership of MO.

3. External Assessor reports for each educational provider for the previous 3 years / the maximum time available.

4. Minutes of the meeting(s) of the MO when the External Assessor reports were considered.

5. The completed documentation should be sent to the secretary of IFOMT by the required date.

6. Appendix F details the proforma for the review of the submitted documentation by each member of the SC of IFOMT.

7. Following decision of the SC
- The MO is sent a copy of the final report and statement regarding the recommendations of the SC
- The recommendations from the SC will be made to the IFOMT Executive.
- In the event the MO is unsuccessful, the MO will be advised on the areas where the MO failed to meet the standards. The report would also recommend any follow-up that would be required by the SC.

References

Cuttance P (1997). Monitoring educational quality. In: Preedy M, Glatter R, Levacic R (Eds). Educational Management: Strategy, Quality and Resources. Buckingham, Open University Press.

Doherty GD (1994). Developing Quality Systems in Education. London, Routledge.

Preedy M, Glatter R, Levacic R (1997). Introduction: managing quality, resources and strategy. In: Preedy M, Glatter R, Levacic R (Eds). Educational Management: Strategy, Quality and Resources. Buckingham, Open University Press.

Stuart N (1994). Quality in education. In: Ribbins P, Burridge E (Eds). Improving Education: promoting quality in Schools, London, Cassell.

For further information regarding the establishment of a committee as part of the MO to monitor quality, see:

Rushton A, Petty N (2002). The Course Approval Board of the Manipulation Association of Chartered Physiotherapists, Manual Therapy, Vol.7, No.4, pp.222-228.

Appendices:

A. Guidelines for good practice of educational programmes

The following components of an educational programme are acknowledged as good practice nationally and internationally:

- Clarity of the following components of an educational programme:
  - ✓ Aims
  - ✓ Learning outcomes
  - ✓ Content of the programme
  - ✓ Delivery of the programme
  - ✓ Structure and organisation of the clinical placement
  - ✓ Assessment processes
  - ✓ Assessment criteria
  - ✓ Support for the educational programme e.g. facilities
  - ✓ Student support
  - ✓ Monitoring of quality e.g. evaluation of the programme
- Documentation of all the above components

B. **Criteria for External Assessors**

Physiotherapists who may be considered to fulfil this role must *normally* fulfil the following requirements:

- Be a member of the Member Organisation
- Have an understanding of the requirements of IFOMT
- Hold a higher degree of an equivalent level or higher to the programme being assessed, for example an MSc
- Have teaching and examining experience in manipulative physiotherapy, ideally at the same level as the proposed course
- Have some experience of course development, and in committee work within an educational establishment, or as a course team member
- Have some experience as a clinical educator / mentor or examiner of manipulative physiotherapy

C. **Role of the External Assessor**

The role of the External Assessor is primarily to ensure the theoretical and clinical standards of the educational programme are satisfactory. They will monitor the:

a. Standards of any written work
b. Organisation of the clinical placement
c. Quality of the clinical placement experience
d. Suitability of the Clinical Mentor
e. Standard of the clinical examination
f. Overall quality of the educational programme
g. Quality of the educational experience

As an External Assessor you can and should request:

- Full documentation of the course
- Full documentation of the clinical placement
- Curriculum Vitae of all tutors and clinical mentors

You should be invited to observe any practical and clinical examinations. You should have the opportunity to talk to students undertaking the educational programme.

D. Guidelines for External Assessor regarding their annual report to the MO

Give the name of the educational programme, institution if relevant and the year of the report.
List exactly what you have done this past year, e.g. how many pieces of what written work you have looked at and what examinations have you observed.
For each of the things that you have done, provide your thoughts and opinions. Give your opinion as to the standard of the work. Be as constructive as possible with your comments.
Identify any areas that have been discussed with the programme team and dealt with over the year.
Identify any new areas that you would like the programme team to consider.

Make comment on the following areas within your report, making reference to specific evidence where it is available:

1. The achievement of the published learning outcomes and the continuing appropriateness of these outcomes to the course
2. The performance of the students against accepted standards in manipulative physiotherapy
3. The strengths and weaknesses of the students
4. The quality of the knowledge and skills (both general and subject specific) demonstrated by the students
5. The structure, organisation, design, marking and standards of all assessments
6. The continuing appropriateness of each module/unit examined, including the extent to which assessments afford the opportunity for a student to demonstrate achievement of the learning outcomes
7. The lessons to be learnt from the assessments, curriculum, syllabus, teaching methods and resources
8. Any other recommendations arising from the assessments
9. The conduct and professionalism in the management of the students' marks and progress
10. Whether concerns raised last year have been appropriately considered, where appropriate
11. The experience of the tutors contributing to the theoretical and clinical components of the course

External Assessors are reminded that individual students should not be mentioned by name or implication.

E. Guidelines for the evaluation of new programmes

- Ensure that the educational programme fulfils the IFOMT educational standards
- Ensure assessment / examination procedures fulfil IFOMT's criteria
- Ensure the suitability of those teaching the practical and theoretical aspects of the course
- Ensure that the clinical mentors are members of the MO or recognised as equivalent, and of suitable experience

The educational programme documentation and the Curriculum Vitae of those involved can be used as a basis for this evaluation

F. Review of international monitoring documentation by Standards Committee
(Please type and email document to Chair of SC)

Member Organisation:

Reviewer's name:

Date of documentation submission:

Date of review:

Date of Standards Committee meeting for decision:

Requirement for Educational Standards As evidenced by the MO's process of quality monitoring and the External Examiner / External Assessor annual reports	**No evidence**	**Partial evidence**	**Full evidence**
200 hours of cognitive and scientific study has been / is being provided			
Theoretical course content			
Comments:			
Standards of written work reviewed			
Comments:			
Organisation of the clinical placements			
150 hours of mentored clinical practice			
Quality of the clinical placement experiences			
Suitability of the Clinical Mentors			
Comments:			
Standard of the clinical examinations			
Comments:			
Overall quality of the educational programmes			
Comments:			
Quality of the educational experiences for students			

Comments:			
Processes of quality monitoring and evaluation of educational programmes by MO			
Comments:			
Independent working of the External Assessor(s) for MO			
Comments:			
Educational programmes evaluated as fulfilling IFOMT standards by MO			
Comments:			

Recommendation of reviewer (please tick one):

- ☐ Full evidence provided of quality of educational standards of MO
- ☐ Partial evidence provided of quality of educational standards of MO
- ☐ No evidence provided of quality of educational standards of MO

Comments:

Signed: …….. (Reviewer)

Decision of Standards Committee

Signed: …… (Chair SC)
Date: ……..