Postgraduate Educational Programme

Assessment, Examination and Treatment of
Neuromusculoskeletal Disorders
Based on the Principles of
the Maitland® Concept of Manipulative Physiotherapy
(IMTA)

Learners' Manual

General Information, organisation,
assignments & assessments, feedback/evaluation forms
Literature Lists

Cohort: 2013 - 2016
Cohort: 2014 – 2017
Cohort: 2015 – 2018
Cohort: 2016 - 2019

In cooperation with:

www. imta.ch
www.maitland.nl
www.nexus-physiotherapy.eu

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This document is used in conjunction with the following documents:

- Study Logbook & Diary ("Studiehandleiding II")

- Documents Mentored Clinical Practice ("Stage 1, 2, 3")

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1 Welcome

Welcome to the educational programme based on the principles of the Maitland© Concept of Manipulative Physiotherapy (MSK Physiotherapy), which has been developed for those physiotherapists who want to enhance their clinical reasoning, communication and handling skills in the assessment and treatment of patients with musculoskeletal disorders, without neglecting theoretical aspects & related evidence based practice.
This educational programme is in accordance with IFOMPT's[1] definition of Orthopaedic Manipulative Physiotherapy:

> Orthopaedic Manual Therapy is a specialised area of physiotherapy / physical therapy for the management of neuro-musculoskeletal 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.
>
> (IFOMPT, 2004)

The special qualities of this educational programme are found in the contact time over 3-5 consecutive days, which allows learners and teachers indepth follow-up of relevant topics. Also the programme is characterised by the direct applicability in clinical practice, with a balanced approach to theory and practice as well as by patient assessment & treatment sessions during contact hours to allow for realtime reflection, application and broadening of the course contents.

We wish you lots of satisfaction this study programme and we hope that you will be able to enrich the approach to your daily work as a physiotherapy clinician.

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[1] IFOMPT: Internationation Federation of Orthopaedic Manual Physical Therapy, an official subgroup of WCPT (World Confederation of Physical Therapy. IFOMPT has developed standards for educational programmes in manipulative physiotherapy (MSK Physiotherapy). In order to become a representing country in IFOMPT, memberorganisations need to have set up a postgraduate educational programme in OMT / Musculoskeletal Physiotherapy.

2 Preface

This postgraduate educational program is planned, organised and executed by the IMTA Teaching Faculty NL in cooperation with Nexus – Fysiotherapie Opleidingen in Gennep, the Netherlands. The program is approved and under the auspices of the International Maitland Teachers' Association (IMTA) (www.imta.ch).

The program has included the modules Level 1, 2A, 2B and 3 as defined in IMTA's curriculum. In addition to this program, in order to fulfil the requirements of the Role of Clinical Specialist as defined by the Dutch Association of Manual Therapy /NVMT, additional modules as research and mentored clinical practice have been implemented in this educational program (see table 1). Also additional ongoing summative assessment been integrated into this educational program to allow teachers and learners to evaluate of learning outcomes and competencies have been achieved.

This educational program is spread out over a period of 3 years. After successful completion of the program, learners may apply for the Masters programs of the following universities:

- Sheffield Hallam University, UK
- Universität von Osnabrücl, Germany
- Avans+, Breda, the Netherlands

Table 2.1 Short overview of the educational program (for more details, see chapter 4)

Study year	Modules	Contact time
1	• IMTA Level 1 • Skills training • Mentored Clinical Practice I • Research A	• 20 days • 1 day • 4 days • 1 day
2	• IMTA Level 2A • IMTA Level 2B • Skills training • Research B • Mentored Clinical Practice II	• 10 days • 10 days • 1 day • 1 da • 6 days
3	• IMTA Level 3 • Skills training • Mentored Clinical Practice III • Research C • Patient examination • Final presentation	• 15 days • 1 day • 8 days • 1 day • on 2 days • 1 day

Remark:
As stated in Chapter 1, this program is designed for physiotherapists wishing to enhance their clinical skills.
Until 31.12.2014 physiotherapists who completed this educational program were eligible to be included in the BIG-register "manuele therapie" in the Netherlands and have been exempted for the accreditation point of postgraduate mandatory education in the given period of education
As of 1.1.2015 inclusion into the BIG-register "manuele therapie" is only possible after completion of a relevant Masters program, after completion of this study program (see also chapter 4).
For the current educational program accreditation has been requested for each study year.

3 About IMTA & IMTA Teaching Faculty Netherlands

3.1 About International Maitland Teacher Assoication (IMTA)

IMTA is a financially, politically and religiously independent organisation of postgraduate teachers of manipulative physiotherapy.

The association is committed to the standardisation, development and promotion of manipulative physiotherapy based on the Maitland® Concept, to the training of the therapists applying it as well as to the training and certification of IMTA recognised teachers.

The IMTA's programme of postgraduate education in manipulative physiotherapy aims to improve the skills of participants in the treatment of movement dysfunction and thereby to contribute to the improvement of the management of patients with neuromusculoskeletal problems.

Contact Information : info@imta.ch

Further information about IMTA can be found by visiting www.imta.ch

3.2 About IMTA Teaching Faculty Netherlands

The IMTA Teaching Faculty Netherlands is a recognised affiliate of IMTA and reports directly to IMTA.

Its main purpose is to monitor, plan and organise IMTA's educational program in the Netherlands and to adapt this program to the specific needs of learners, and other stakeholders as for example professional associations, in the Netherlands.

Members are at least 2 IMTA teachers. Additional members may be included to the faculty.

The IMTA Teaching Faculty NL cooperates with "Nexus Fysiotherapie Opleidingen" in Gennep. Both organisations share a common philosophy in the enhancement of clinical skills, clinical reasoning, examination and assessment, selection of active and passive movement therapies, therapeutic communication and evidence-informed-practice in combination with "best practice" or "wise practice".

3.3 IMTA Certified Teachers

IMTA has defined 2 teacher categories:

- IMTA teacher
- IMTA senior techer
-

3.3.1 Certification of IMTA Teachers

Physiotherapists may apply to be admitted to IMTA's Teacher Training Program after successful completion of IMTA's educational program, including OMT qualification. Ideally they also have completed a MSc program.

IMTA's teachers are qualified according to IMTA's rigorous training program, which takes at least 5 years after qualification at the IMTA Level 3 course (or an equivalent program) and includes, among other elements:

- mentorship training through assisting course delivery,
- developing advanced handling skills and
- training in educational methods

3.3.2 Qualification of IMTA Senior Teachers

IMTA Senior teachers are IMTA teachers with at least 5 years of teaching experience on IMTA courses and are eligible to teach on Level 2a, 2b and level 3 courses autonomously. They will be supporting and monitoring teachers, wishing to qualify as a senior teacher.

In order to qualify as an IMTA senior teacher, teachers need to fulfil the following requirements:

- Co-teach with a senior-teacher on at least 5 courses for which they wish to qualify
- In addition, all lectures have been taught and evaluated as satisfactory by the senior teacher
- Completion of specific tasks as Critically Appraised Papers with regards to the educational topics of the modules concerned as well as lesson plans and lesson material have been evaluated by the senior teacher(s).
- Special attention is given to the teaching of higher risk interventions, as for example high velocity thrust technique of the whole spine, especially the areas between Occiput and T2
- Providing feedback forms of learners and course organiser on performance and collaboration.

All IMTA teachers continue to practice clinically for at least 600 hours a year in the field of NMS physiotherapy and maintain regular continual professional development.

For detailed information of the teachers' training program please visit www.imta.ch

4 IMTA NL – Educational Programme Specifications

4.1 Overall Aim of the Study Programme[2]

The IMTA offers a part time postgraduate educational programme in manipulative physiotherapy. The overall aim of the course programme is to equip learners with clinical problem solving and manual skills and therefore enhance clinical practice in the manipulative physiotherapy management of patients with neuromusculoskeletal disorders.

The programme aims to facilitate deep learning processes in order to integrate learning with clinical practice. Learners will be supported in their academic and clinical development towards becoming enquiring and challenging manipulative physiotherapists who are able to critically evaluate scientific nd cinical information and transfer it into clinical practice.

4.2 Programme Learning Objectives

The learner will explore, critically evaluate, and develop ideas and critically analyse evidence relating to:

- The role of manipulative physiotherapy based on the principles of the Maitland® Concept in clinical practice within a biopsychosocial framework.
- The integration of other NMS approaches with the Maitland® Concept for the management and rehabilitation of NMS dysfunction.
- Clinical reasoning, assessment, examination and treatment procedures of patients with NMS dysfunction.
- The role and application of mobilisation and manipulation (Grade V) as well as self-management programmes for arthrogenic, myogenic, soft tissue and neurodynamic conditions, and neurophysiological pain mechanisms.
- Underpinning theoretical and scientific knowledge with regards to manipulative physiotherapy ("evidence based practice" – "evidence informed practice"), levels of scientific evidence and the relation to clinical practice.
- Clinical patterns and their specific role in clinical decision making processes with regards to manipulative physiotherapy and management of NMS of movement disorders.

4.3 Programme Overview

The study-programme takes place over a period of 3 years.

The programme encompasses IMTA's Level 1-3 modules; additional modules as research, mentored clinical practice and self-directed learning modules as "reflective learning" and "screening for biomedical disease" are being integrated into the programme

Table 4.1 gives a detailed overview of the programme modules, general contents, summative assessments, assignments and credits (ECTS).

[2] This IMTA Programme has been adapted to the specific requirements of the postgraduate education in manual therapy in the Netherlands (Role Clinical Specialist) – see also Chapter 2: Preface

Table 4.1: Overview of the educational programme

Study year	Modules	Study time (CT: contact time; SSt: selfstudy / groupstudy)		Contents (*more detailed information in Chapter 6: Module Descriptions*)	Summative Assessments	Special Assignments during the study year / formative assessments	ECTS
1	• IMTA Level 1: *Foundations of Manual Therapy* • Skillstraining • Research A • Mentored Clinical Practice I (MCP 1)	CT:140 / SST: 140 CT: 7 / SSt: 10 CT: 7 / SSt: 10 CT: 32 /SSt: 15	Reflective learning with Study Logbook & Portfolio	IMTA Level 1: • Basic Principles Maitland® Concept • Clinical Reasoning – hypotheses categories • Communication • Assessment & Treatment teachniques of all body areas • Documentation Research A: • Reflection on role of research in general and specifically for manual therapy. Levels of evidence. Evidence Based Practice – principles, application MCP 1: • See Module Description (Chapter 6) & Document for Mentored Clinical Practice (IMTA Teaching Faculty NL)	• Patient records (3) • Skills examination • Theory examination	• Screening biomedical disease • Specific orthopaedic tests shoulder girdle, knee • Other Concepts & relation to Maitland Concept, in particular relation to self-management • Selected questions regarding research & clinical practice • MCP 1	
2	• IMTA Level 2A: *Underpinning Concepts and Developing Skills* • IMTA Level 2B: *Advanced Skills and Clinical Reasoning* • Skills training • Research B • Mentored Clinical Practice 2 (MCP 2) • Screening Biomedical Disease	CT: 70 / SSt:70 CT: 70 / SSt: 70 CT: 7 / SSt 10 CT: 7 / SSt: 30 CT: 48 / SSt:24 CT: within modules Level , 2A and 2B; SSt: 10		IMTA Level 2A: • Clinical Pattern development, selected clinical patterns • Neurodynamics • The role of compression in the treatment of intraarticular movement disorders • Biomechanics of the spine • Combined movements in examination and treatments IMTA Level 2B: • Clinical Reasoning and evidence based practice • Lumbar instability • Cervical Instability • HVT Grade 5 (manipulations as progression of treatment of passive mobilisations) • Neurophysiological pain mechanisms Research B: • Critical appraisal of relevant scientific publications MCP 2: • See Module Description (Chapter 6) & Document for Mentored Clinical Practice (IMTA Teaching Faculty NL) Screening Biomedical Disease • See Module Description (Chapter 6)	• Patient record • Case based skills examination • Theory examination • MCP 2 • 3 CriticallyAppraised Papers (CAP) related to a clinical question (PICO)	• Self directed lerning with reader "research" to support research module • Self directed learning "Screening Biomedical Disease" with a reader	
3	• IMTA Level 3: *Integrating Approaches* • Skills training • Research C • Mentored Clinical Practice 3 (MCP 3) • Final Examination day	CT: 105 / SSt: 105 CT: 7 / SSt 10 CT: 7 / SSt: 60 CT: 64 / SSt: 24 CT: 8 / SSt: 16		IMTA Level 3: • Chronic pain management • Dynamic control lower extremities • Craniomandibular dysfunctions Research C: • Clinical Case Report: relevance in research processes MCP 3: • See Module Description (Chapter 6) & Document Mentored Clinical Practice	• Case based skills examination • Clinical Case Report written presentation • Clinical Case verbal present. • Learning report • MCP 3 • Patient examination – 2 sessions	• Group presentations regarding dynamic control, training, aerobic conditioning, edurance and agility	
						Total ECTS	**45**

4.4 Methods of Delivery of the Educational Program

- The programme will be delivered by IMTA certified teachers and selected guest teachers.
- Modules mostly will be delivered in periods of 3-5 days consecutively, with self-directed learning tasks between modules.
- Learners will be a resource, bringing with them their clinical experience and prior knowledge, which will be utilised as a learning resource.
- The IMTA programme will build on the knowledge, skills and understanding of undergraduate physiotherapy. This will include the development of precise and sensitive handling skills, clinical reasoning competencies, improved clinical practice, a broader and deeper knowledge and understanding of neuromusculoskeletal disorders, a greater awareness of the context and scope of practice of manipulative physiotherapy and its application and the encouragement of innovative patient management.
- The programme is based on a competence-orientated curriculum and facilitates learners in the further development of their roles as clinical decision makers / clinical experts, communicators, collaborators, managers, health advocates, scholars and professionals (see chapter 8).
- During the course of the programme emphasis of teaching and learning will shift from focus on tutor oriented towards learner oriented.
  This shift is accompanied by a progression of the level of learning, as reflected in learning outcomes and assessment criteria. Active participation of learners as well as peer support and peer assessment will facilitate deep learning & understanding.
- The learning process is embedded in a learning environment of active participation with self-directed and tutor-guided learning activities, in order to encourage life long learning attitudes and to develop qualities of a reflective practitioner.
- Learning throughout the modules is facilitated through a variety of methods, allowing for the development of the individual learner's learning styles. This includes lectures, practical demonstrations and hands-on practice, clinical case examples, clinical reasoning exercises, patient demonstrations and supervised clinical practice, learners' verbal presentations.
- Patient treatment sessions under supervision are an integrated part of the programme.
  This allows the application of principles and practice during patient treatment demonstrations by the teachers as well as during supervised patient treatment sessions by the learners.
- As learners progress through the programme they will be increasingly familiarised with their role as a scholar and made aware of the relevance of this role from a clinical perspective and in a clinical setting.
- To promote and support the attitude of a "reflective practitioner" each learner will receive a study logbook at the beginning of IMTA Level 1 (study year 1). This serves as a framework for an individual study portfolio. Learners will work actively with this document and use it to store and record directed and self-directed learning tasks and reflections throughout the whole programme. Current practice will be explored and evaluated by critical appraisal and synthesis of literature. Various forms of course materials will support the learner such as course handbooks, selected papers, video/dvd and e-learning.

4.5 Level of Learning

The overall level of learning is equivalent to level 6-7 (year 1), level 7 in the study years 2 and 3 (see table 4.2).

Table 4.2: levels of learning

Level 6	Level 7
Development of Knowledge and Understanding (subject specific) **The Learner:** • **Knowledge base:** has a comprehensive/detailed knowledge of a major discipline(s), with areas of specialisation in depth, and an awareness of the provisional nature of knowledge. • **Ethical issues**: is aware of personal responsibility and professional codes of conduct and can incorporate a critical ethical dimension into a major piece of work. **Cognitive/Intellectual skills (generic)** **The Learner:** • **Analysis:** can analyse new and/or abstract data and situations without guidance, using a range of techniques appropriate to the subject. • **Synthesis**: with minimum guidance can transform abstract data and concepts towards a given purpose and design novel solutions. • **Evaluation**: can critically evaluate evidence to support conclusions/ recommendations, reviewing its reliability, validity and significance. Can investigate contradictory information/identify reasons for contradictions. • **Application**: is confident and flexible in identifying and defining complex problems and can apply appropriate knowledge and skills to their solution. **Key/transferable skills (generic)** **The Learner:** • **Group working**: can interact effectively within a team/learning/professional group, recognise, support or be proactive in leadership, negotiate in a professional context and manage conflict. • **Learning resources**: with minimum guidance can manage own learning using full range of resources for the discipline(s). Can work professionally within the discipline. • **Self-evaluation**: is confident in application of own criteria of judgement and can challenge received opinion and reflect on action. Can seek and make use of feedback. • **Information management**: can select and manage information, competently undertaking reasonably straightforward research tasks with minimum guidance. • **Autonomy**: can take responsibility for own work and can criticise it. • **Communications**: can engage effectively in debate in a professional manner and produce detailed and coherent project reports. • **Problem solving**: is confident and flexible in identifying and defining complex problems and the application of appropriate knowledge, tools/methods to their solution. **Practical skills (subject specific)** **The Learner:** • **Application of skills**: can operate in complex and unpredictable contexts, requiring selection and application from a wide range of innovative or standard techniques. • **Autonomy in skill use**: able to act autonomously, with minimal supervision or direction, within agreed guidelines.	**Development of Knowledge and Understanding** **The Learner:** • **Knowledge base**: has depth and systematic understanding of knowledge in specialised/applied areas and/across areas and can work with theoretical/research-based knowledge at the forefront of their academic discipline. • **Ethical issues**: has the awareness and ability to manage the implications of ethical dilemmas and work pro-actively with others to formulate solutions. • **Disciplinary methodologies**: has a comprehensive understanding of techniques/ methodologies applicable to their own work (theory or research-based). **Cognitive and Intellectual Skills** **The Learner:** • **Analysis:** with critical awareness can undertake analysis of complex, incomplete or contradictory areas of knowledge communicating the outcome effectively. • **Synthesis**: with critical awareness, can synthesise information in a manner that may be innovative, utilising knowledge or processes from the forefront of the discipline/practice. • **Evaluation**: has a level of conceptual understanding that will allow her/him critically to evaluate research, advanced scholarship and methodologies and argue alternative approaches. • **Application**: can demonstrate initiative and originality in problem solving. Can act autonomously in planning and implementing tasks at a professional or equivalent level, making decisions in complex and unpredictable situations. **Key/Transferable Skills** **The Learner:** • **Group working**: can work effectively with a group as leader or member. Can clarify tasks and make appropriate use of the capacities of group members. Is able to negotiate and handle conflict with confidence. • **Learning resources**: is able to use full range of learning resources. • **Self-evaluation**: is reflective on own and others' functioning in order to improve practice. • **Management of information**: can competently undertake research tasks with minimum guidance. • **Autonomy**: is an independent and self-critical learner, guiding the learning of others and managing own requirements for continuing professional development. • **Communications**: can engage confidently in academic and professional communication with others, reporting on action clearly, autonomously and competently • **Problem solving**: has independent learning ability required for continuing professional study, making professional use of others where appropriate. **Practical Skills** **The Learner:** • **Application of skills**: can operate in complex and unpredictable and/or specialised contexts, and has an overview of the issues governing good practice. • **Autonomy in skill use**: is able to exercise initiative and personal responsibility in professional practice. • **Technical expertise**: has technical expertise, performs smoothly with precision and effectiveness; can adapt skills and design or develop new skills and/or procedures for new situations.

Source: Southern England Consortium for Credit Accumulation and Transfer (2003) *Credit Level Descriptors for Further and Higher Education*. SECC, Brentwood, UK

4.6 Indicative Learning, Teaching and Assessment activities

Teachers will provide the learner with appropriate support and guidance. The teacher is responsible for designing and facilitating relevant learning opportunities to enable the learner to actively engage with and contribute to the learning process. The learner will be required to undertake periods of directed and self-directed learning between the contact weeks.

4.6.1 Tutor Activities

Tutor led learning will include activities such as:

- Presentations
- Skills demonstration and practice under supervision
- Demonstration of patient assessment and treatment
- Provide advice and feedback
- Facilitate group-discussions and group-work
- Patient assessment and treatment by the learners
- Support during self directed learning sessions
- Facilitate peer assessment activities
- Set relevant student-directed tasks

4.6.2 Self directed learning

The learner will be expected to carry out independent and directed study to complement their learning and development. These activities will include:

During teaching weeks:

- Reflection on theory and practice during and after clinical supervised practice sessions.
- Preparation of presentations, individually or in small groups.

In-between teaching weeks:

- Keeping a logbook / reflective study diary, which is provided by the course organisation.
  This study logbook will guide the learner throughout the program and provides specific information of learning activities and organisational issues
- Reading of identified background information and literature to help to broaden the theoretical background relevant to module content
- Practice of examination and treatment techniques with peers during and in between the course weeks.
- Reflective clinical practice with the application of learning in the work place. The learner is expected to work clinically between the course weeks with patients primarily with neuromusculoskeletal problems. A learner's manual will guide the learner throughout the programme and provide specific information regarding learning activities and organisational issues.
- Preparation of presentations, individually or in small groups.

4.6.3 Formative assessment

- Formative assessment will be integrated throughout the module.
- Feedback on all formative activities will be given during and immediately after the activity.
- A variety of types of formative assessment will be used, such as:
  - Questioning, discussion and debate
  - Observation of learners' performance of new techniques/skills
  - Peer assessment in small groups
  - Patient examination and treatment sessions

4.6.4 Summative assessment

- Ongoing theoretical and practical summative assessments provide learners and teachers an overview if the learning outcomes and competencies for the given modules have been achieved.
- The assessments are organised and linked in such a way, that they prepare for the final clinical and theoretical examinations of the last stud year (Clinical Case Report; Assessment, treatment and clinical reasoning of a patient over 2 therapeutic sessions)
- Each assessment needs to be passed, in order to be admitted to the final examinations.
- For further information about assessments, criteria & evaluation forms: see chapter 6

4.6.5 Accreditation, Certificates and Registration

Certificates

- At the successful completion of the educational program, learners will receive the Certificate of Competence of the IMTA/IMTA Teaching Faculty (NL), with an overview of the summative assessment results.
- If required a certificate may be given at the completion of a study year, with an overview of the attended modules and results of summative assessments.

Masters Programmes

- After successful completion of the program, learners are eligible to register for Masters programs at the following Universities.
- If they can demonstrate that they have achieved already learning outcomes as defined by the universities concerned, they may receive accreditation for some modules ("APEL" – Accreditation of Prior Learning and Experience). The decision to give accreditation lies entirely by the universities:
    - Sheffield Hallam University, England (MSc Manual Therapy / General Physiotherapy)
    - Universität von Osnabruck, Germany (MSc Manuelle Therapie)
    - Avans+, Breda, the Netherland (Professional Masters Program, adapted program)

Accreditation KNGF / Registration BOCK- Register – the NEtherlands

- Until 31.12.2014 physiotherapists who completed this educational program were eligible to be included in the BIG-register "manuele therapie" in the Netherlands and have been exempted for the registration of accreditation points for postgraduate mandatory education in the given period until 31.12.2014.
- As of 1.1.2015 inclusion into the BIG-register "manuele therapie" is only possible after completion of a relevant Masters program, after completion of this study program (see also chapter 4).
- For the current educational program accreditation has been requested for each study year.

4.6.6 Program Calendar – general overview (dutch)

Note: a detailed calendar will be made available to the learners on Nexus' Studyplatform.

	Module	Data	Toetsen, opdrachten
Jaar 1	IMTA Level 1 / week 1	Herfst	
	IMTA Level 1 / week 2	Herfst	• Patiëntenverslag (Anamnese) (S**) • Groepspresentaties (Text) screeningvragen „functiesystemen" (F**)
	Aanmelden voor stage – met inschrijfformulier stage (voorkeursprovincies)		• Bij stagecoördinator
	IMTA Level 1 / week 3	Lente	• Patiëntenverslag (Anamnese, Planning, P/E, Rx, Planning)) • Groepsopdracht „Concepten" (F)
	Research - dag 1	*Lente*	• Groepsopdracht met discussievragen over relatie research – klinische praktijk)
	Vaardigheidstraining	Lente	
	IMTA Level 1 / week 4	Eind Lente/begin zomer	• Patiëntenverslag (2 Zittingen & Planning 3e zitting) (S) • Groepsopdracht „Research" (F) • Theorietoets (MCQ) (S) • Vaardighedentoets (S)
	Stage / MCP 1	4 dagen / tussen 1. Mei en 1 Oktober	• Stagebeoordeling (F)
Jaar 2	IMTA Level 2A / week 1	Herrfst	• Patiëntenverslag – 5-6 Zittingen (S)
	Research - dag 2	Herfst	• *3x CAP – Critically Appraised Paper (S)*
	Vaardigheidstraining	Herfst	
	IMTA Level 2A / week 2	Eind herfst	• Vaardighedentoets (S)
	CAP 1		• Inleveren bij docent "Research in Practice"
	IMTA Level 2B / week 1	Lente	
	Screening Biomedical Disease	Self directed learning	
	IMTA Level 2B / week 2	Eind lente / begin zomer	• theorietoets (inkl vragen screening biomed. disease) (S)
	CAP 2		• Inleveren bij docent "Research in Practice"
	Stage / MCP 2	6 dagen – tussen 1 April en 31 Augustus	• Stagebeoordeling (S) & 2 patiëntensessies (S)
Jaar 3	CAP 3		• Inleveren bij docent
	IMTA Level 3 / week 1	Herfst	•
	Research - dag 3	Herfst	• Clin. Case Report (S)
	Vaardigheidstraining	Herfst	
	Inleveren onderwerp Clinical Case Report	1 December	Inleveren bij docent "Research in Practice"
	IMTA Level 3 / 2	Begin Winter	& vaardighedentoets technieken (S)
	Stage / MCP 3	8 dagen – uierlijk tot 31 Maart	Stagebeoordeling (S)
	Training, Motor Learning, Life Style & Mov. Behaviour		Groepsopdracht – presentatie (S) *(tijdens week 3 / level 3)*
	IMTA Level 3 / week 3	Lente	
	Inleveren Case Report	1 April	Inleveren bij Marijke Slighers
	Patiëntenexamen	Mei / Juni	*Indeling, indien mogelijk, op een stageadres waar ook stage was gevolgd.*
	Inleveren Leerbericht	01 Juni	
	Mondelinge presentatie Clinical Case Report	Juni	
	Afsluitende toetsen • Techniekentoets tijdens week 2 / level 3 • Patiëntensessies (2 zittingen) bij twee geselecteerde stagebegeleiders • Leerbericht , evt met gesprek opleidingscoördinator Clinical Case Report schriftelijk & mondelinge presentatie (mondelinge presentatie: Juni)		

5 Organisational Aspects, General Information

5.1 Addresses

- **Course Location**:
  Nexus Fysiotherapie Opleidingen – Langeweg 204 – 6591 XA Gennep
  Telephone: 024 – 301 04 85
  email: info@nexus-physiotherapy.eu
- **Course organisation / administration – general inquiries about the educational program:**
  Nexus Fysiotherapie OPleidingen - Langeweg 204 – 6591 XA Gennep
  Telephone: 024 – 301 04 85
  email: info@nexus-physiotherapy.eu
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- **IMTA Teaching Faculty Netherlands**
  C/O Nexus Fysiotherapie Opleidingen – Langeweg 204 – 6591 XA Gennep
  Telephone: 024 – 301 04 85
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  www.maitland.nl
  www.nexus--physiotherapy.eu

- **Mentored Clinical Practice:**
  Takes place at the work location of the clinical mentor.

5.2 Course Coordinators

Course coordinators are the members of the IMTA Teaching Faculty NL
- Elly Hengeveld, MSc, B.Health (PT), OMTsvomp, Clin. Spec. Physioswiss/MSK, IMTA Senior Teacher
- Prof. Harry von Piekartz, PhD, B.PT, OMT, IMTA Senior Teacher

5.3 Educational Committee

The educational committee is constituted by the members of the IMTA Teaching Faculty NL, a representative of Nexus.
If necessary other members of IMTA and other educational experts may be consulted

5.4 Registration

- Application for the new study year can take place at any time of the year.
- Start of the new study year: in principle in September
- Learners register for the 3 years program, in case of cancellation for the following study year, a written statement by mail has to be sent to Nexus Fysiotherapie Opleidingen, latest 2 months

before the start of the new study year. In all cases the Rules and Regulations regarding course cancellation of Nexus Fysiotherapie Opleidingen apply.

5.4.1 Attendees from other IMTA Courses, outside of the Netherlands

Learners who have completed IMTA recognized course outside of the Netherlands are eligible to apply for the subsequent courses or study years respectively. However they may need to complete additional examinations and tests as outlined in this document in order to make the programme fully equivalent to the requirements as defined in this Learners' Manual.

5.5 Accreditation

Until 31.12.2014 physiotherapists who completed this educational program were eligible to be included in the BIG-register "manuele therapie" in the Netherlands and have been exempted for the accreditation point of postgraduate mandatory education in the given period of education

As of 1.1.2015 inclusion into the BIG-register "manuele therapie" is only possible after completion of a relevant Masters program, after completion of this study program (see also chapter 4).

For the current educational program accreditation has been requested for each study year. (pending).

5.6 Resources

- Nexus Studyplatform
  This includes relevant articles, course hand books, relevant document regarding Mentored Clinical Practice, evaluations form etc.
- Each module will be supported by a course handbook, "Studiehandleiding 2" – Learners's Study Logbook & Diary, and the mandatory literature
- www.imta.ch - login to practice videos, blog and general information, incl. online & paper based learning, e-learning facilities
- www.nexus-physiotherapy.eu
- www.maitland.nl
- Module teachers
- Clinical Mentors
- Electronic databases as for example PubMed, Cochrane, Google Scholar, CINAHL
- Peers & Intervision groups
- "Studiehandleiding 2" – Learners's Study Logbook & Diary

5.7 Nexus Study Platform

Registered students will receive the access code for the Nexus Study Platform by the course organizer.

Contents of this Study Platform are:

- Nieuwsforum
- Blog & discussieforum
- OPleidingsdata
- Studielogboek & inlogcode www.imta.ch
- Cursusscripten, powerpoint presentaties, handouts
- Formulieren, studieopdrachten, informative over toetsen en examen
- Studiehandleiding 1 (Learners' Manual)
- Informatie over Stages (Mentored Clinical Practice)
- Artikelen (verplicht, facultatiedf ter aanvulling van het leerproces)

6 Module Descriptions

6.1 IMTA Level 1

Module Title	Level 1 – Foundations of Manual Therapy
Level of Learning	EU academic level 6 - 7
Credit Points (ECTS)	Equivalent 9 ECTS
Indicative Summative Assessment **Components & Percentage Weightings**	3 Records of patient treatment sessions Practical case based assessment, including demonstration of practical skills Theory examination (MCQ & open questions)
Pre-Requisite	A WCPT recognised physiotherapy qualification or qualification as a medical doctor working in the field of NMS physiotherapy or wishing to qualify to start working in this field.
Delivery Pattern	Usually 4 weeks of 5 days contact time with additional self directed learning sessions as well as self directed learning between weeks
Course Language	Dutch; if this would not be possible: English.
Contact hours	IMTA Level 1 module: 35 x 4 = 140 hours Additional skills training with examination & treatment techniques: 7 hours Total: 147 hours
Self-study time	150 hours over approximately 12 months
Essential Reading	• IMTA Module Handbook (Level 1 – dutch / provided by teacher) • Hengeveld E. & Banks K., editors. (2014) Maitland's Vertebral Manipulation – Management of Musculoskeletal Disorders. Vol. 1, 8th ed. Elsevier-Churchill Livingstone, Edinburgh* • Hengeveld E. & Banks K., editors (2014) Maitland's Peripheral Manipulation – Management of Musculoskeletal Disorders. Vol. 2, 5th ed. Elsevier-Churchill Livingstone, Edinburgh* • Selected articles, to prepare and deepen learning** *These publications will be used between course weeks to broaden and deepen the learnin process. The Study Logbook & Portfolio (Studiehandleiding II) will guide learners through the tasks which will need to be fulfilled between course weeks* ** These updated and upgraded works of the internationally recognized publications of Maitland ontain contributions of numerous authors of different countries in the world: for example Jones M (Chapter on Clinical Reasoning), Hall T, Robinston K (Elbow), Maheu E (Pelvic Girdle), Kangas J (Foot & Ankle), Bucher Dollenz (Knee), Addison (Hip), Langendoen (TMJ), Ackermann P & Newton M (Shouldergirdle), Hengeveld E & Banks K (Lumbar Spine, Maitland Concept: evidence Based Paactice and the Movement Sciences; The Maitland Concept as a clinical practice framework; Sustaining Functional Capacity and Performance). NOTE THAT ALL CHAPTERS CONTAIN A UPDATED REFERENCE LIST, which can be consulted for further study* ***Referred to in Study Logbook & Diary; Resource: LOGIN VIA NEXUS STUDY PLATFORM*

Recommended Reading	Additional articles, as listed in literature list (see Chapter 8 of this document) Boissonault W (2010). Primary Care for the physical therapist. Examination and Triage. 2n ed. Elsevier – Saunders, St. Louis Goodman CBC, Snyders TEK (2012) Differential Diagnosis for Physical Therapist: Screening for Referral. 5th ed. Elsevier-Saunders, St. Louis

Module Aims	This module introduces the Maitland® Concept of manipulative Physiotherapy and its application in the management of patients with neuromusculoskeletal movement disorders. It will enable the development of clinical skills to a level adequate for safe and effective patient centred management. It develops existing knowledge and promotes understanding of relevant concepts, theory and mechanisms based on the current evidence. It enables the direct application in clinical practice immediately after each module week.
Module Learning Outcomes	By the end of this module the learner will be able to: • Describe and discuss the contribution and role of the Maitland® Concept of manipulative physiotherapy. • Undertake, discuss and document the assessment and treatment of NMS dysfunction. • Apply and evaluate effective communication strategies within a patient centred approach. • Describe and discuss hypotheses generation in relation to clinical reasoning models and aspects of evidence based practice (evidence informed practice) • Apply and evaluate relevant treatment techniques (grade I–IV) safely and accurately. The progression of treatment is applied both for passive as active treatment modalities
Indicative Module Contents / Topics	• Introduction to the Maitland Concept of Manipulative Physiotherapy (Manual Therapy/MSK Physiotherapy) • Clinical Reasoning: the role of hypotheses generated procedural clinical reasoning on the path to the development of clinical expertise • Clinical Reasoning, Assessment forms and Evidence Based Practice • Theoretical and practical lectures relating to Assessment, Planning en Progression of treatment related to all body areas (Spine, extremities, Temperomandibular joints. This includes the assessment of arthrogenic structures, neurodynamics systems and dynamic control issues (Theory: Practice – 50%:50%) • Concepts of treatment, related to passive mobilizations, concepts of muscular treatment & dynamic control as well as self management, compliance enhancement and behavioural change • Introduction to neurophysiological pain mechanisms, with emphasis on nociceptive pain mechanisms, as well as the relationship of pain and disability in inclusive biopsychosocial models as Mature Organism Model (Gifford1998), and Processing Models (Shacklock, 1998, 1999), ICF (WHO, 2001) *Note: *At the completion of studyweek 3: the module "Research in Practice, part A" will take place– the learning outcomes and learning objectives of research A are linked to the learning outcomes of IMTA Level 1*

6.2 IMTA Level 2a

Module Title	Level 2a – Underpinning Concepts and Developing Skills
Level of Learning	7
Credit Points (ECTS)	6
Indicative Summative Assessment **Components & Percentage Weightings**	Patient record of 5-6 sessions incl. Clinical Reasoning & Planning – 100% Case discussion and practical exam – 100%
Pre-Requisite	Successfull completion oft he first study year oft he IMTA Teaching Faculty NL educational programme. (Physiotherapists who have completed an IMTA Level 1 course at another location than the Netherlands may need to complete the assessments and assignmentss of the first study year, before being accepted in the second study year)
Delivery Pattern	Usually 2 weeks of 5 days contact time with additional self directed learning sessions as well as self directed learning between weeks
Course Language	Dutch, if this would not be possible: English
Contact hours	IMTA Level 2A Module: 2x 35 hours = 70 hours Additional skills training with examination & treatment techniques: 7 hours Total: 77 hours
Self-study time	80 hours over a period of 6 months
Essential Reading	• IMTA Module Handbook (Level 2A, 2B, provided by teacher) • Selected articles, to prepare and deepen learning (see study logbook) • Westerhuis P, Wiesner R. editors (2015) Clinical Patterns in Manual Therapy. Thieme Publishers, Stuttgart New York (info@imta.ch) • Butler D (2001) The Sensitive Nervous System. NOI Publications, Adelaide (www.noigroup.com) • Shacklock M (2005) Clinical Neurodynamics – a new system of musculoskeletal treatment. Elsevier-Butterworth Heinemann, Edinburgh • Hengeveld E & Banks K., editors (2014) Maitland's Vertebral Manipulation – Management of Musculoskeletal Disorders. 8th Ed. Elsevier/Churchill Livingstone, Edinburgh • Hengeveld E & Banks K., editors (2014) Maitland's Peripheral Manipulation – Management of Musculoskeletal Disorders. 5th Ed. Elsevier/Churchill Livingstone, Edinburgh These books will be used between course weeks to broaden and deepen learning. The Study Logbook & Portfolio (Studiehandleiding II) will guide learners through the tasks which will need to be fulfilled between course weeks
Recommended Reading	See Chapter 8, Literature list

Module Aims	This module enables the learner to gain a deepened understanding and application of the Maitland® Concept and manipulative physiotherapy; and the development of analytical and reflective patient management. It facilitates the further development of the learner's understanding and application of the relevant underpinning theory and

	evidence informed clinical and reasoning skills.
Module Learning Outcomes	By the end of the module the learner will be able to: • Critically evaluate and discuss the concepts underpinning the Maitland® Concept and manipulative physiotherapy and their application within a patient centred framework. • Critically evaluate the role and application of examination and treatment techniques (grade I–IV). • Modify and analyse examination and treatment techniques and strategies according to the individual patients needs, based on advanced clinical reasoning skills. • Identify, appraise and integrate relevant theory and clinical reasoning processes, current scientific evidence into the patient centred management of NMS dysfunction.
Indicative Module Contents / Topics	• Consolidation and expansion of the Level 1-foundations of manual therapy content with special attention to differentiation processes, use of compression, combined movements, assessment and treatment of neurodynamic disorders and selected clinical patterns. • Comprehensive range of Manipulative Physiotherapy skills with regards to the subjective examination (C/O), physical examination (P/E), reflection, planning and application of treatment, documentation, integration into overall physiotherapy management and self-management. Grade I to IV mobilization, including progression of treatment utilizing compression to arthrogenic techniques, combined movement, neurodynamic treatment • Clinical Reasoning: clinical pattern development • Relevant theoretical background of neurodynamics and neuropathodynamics, peripheral neurogenic pain mechanisms, selected clinical patterns, combined movements and biomechanics of the spine and applied behavioural sciences • Review and application of Clinical Reasoning in patient-centred management.

Further information about indicative learning, teaching and assessment activities, see § 6.5.

6.3 IMTA Level 2b

Module Title	Level 2b – Advanced Skills and Clinical Reasoning
Level of Learning	7
Credit Points (ECTS)	6
Indicative Summative Assessment **Components & Percentage Weightings**	Theory examination (MCQ, open questions) Practical skills examination based on case discussions
Pre-Requisite	Successfull completion of IMTA Level 2a (Physiotherapists who have completed an IMTA Level 2a course at another location than the Netherlands may need to complete the assessments and assignmentss of the first study year, before being accepted in the second study year)
Delivery Pattern	Usually 2 weeks of 5 days with self directed and directed learning between contact time
Course Language	Dutch, if this would not be possible: English
Contact hours	IMTA Level 2B Module: 2x 35 hours = 70 hours
Self-study time	80 hours over a period of 6 months
Essential Reading	• IMTA Module Handbook (Level 2A, 2B, provided by teacher) • Westerhuis P, Wiesner R (ed) 2014 Clinical Patterns in Manual Therapy. Thieme Publishers, Stuttgart (or german edition) • Hodges P, Cholewicki J, van Dieën JH editors (2013)Spinal Control: The Rehabilitation of Back Pain – State of the Art and Science. Elsevier - Churchill-Livingstone, Edinburgh • IFOMPT Guidelines on premanipulative screening • Boissonault W (2010). Primary Care for the physical therapist. Examination and Triage. 2n ed. Elsevier – Saunders, St. Louis • Goodman CBC, Snyders TEK (2012) Differential Diagnosis for Physical Therapist: Screening for Referral. 5th ed. Elsevier-Saunders, St. LouisSelected articles, to prepare and deepen learning *:these publications will be used between course weeks to deepen and broaden learning. The Study Logbook & Portfolio (Studiehandleiding II) will guide learners through the tasks which will need to be fulfilled between course weeks
Recommended Reading	• Sahrmann S & Associates (2011) Movement System Impairment Syndroms of the Extremities,, Cervical and Thoracic Spines. Elsevier-Mosby, St Louis • Sahrmann S: Diagnosis and Treatment of Movement Impairment Syndromes, St Louis, 2002, Mosby • Hengeveld E & Banks K., editors (2014),, Maitland's Vertebral Manipulation – Management of Musculoskeletal Disorders. 8th Ed. Elsevier/Churchill Livingstone, Edinburgh • Hengeveld E & Banks K., editors (2014) Maitland's Peripheral Manipulation – Management of Musculoskeletal Disorders. 5th Ed. Elsevier/Churchill Livingstone, Edinburgh See chapter 8: reference list

Module Aims	This module enables the learner to build upon their understanding and application of the management of neuromusculoskeletal dysfunction. To further develop reflective and evaluative practice. To explore and critically appraise, the concepts of spinal instability, high velocity thrusts (HVT, Grade V's) and pain management. To facilitate competent assessment and management of instability; the application and integration of a range of manipulative techniques. Learning will be informed by the evidence based practice.
Module Learning Outcomes	By the end of this module the learner will be able to: • Critically appraise and discuss the use of manipulative physiotherapy in the context of interdisciplinary patient centred management for NMS dysfunction. • Describe and discuss the theory and management of spinal instability, as well as indications and conditions for grade V techniques. • Critically evaluate, and discuss relevant examination and treatment techniques, integrating current research evidence. • Demonstrate the safe and relevant performance/set-up of spinal manipulative (grade V) techniques and critically discuss their role and application. • Demonstrate relevant instability tests and critically discuss their role and application. • Critically appraise and discuss the literature and current evidence underpinning pain theory, management and treatment.
Indicative Module Contents / Topics	• Consolidation and deepening of previous module content such as behavioural sciences and neurodynamics. • Advanced skills in the assessment and management of arthrogenic, myogenic and neurogenic components of movement disorders of the spine. • Consolidation and expansion of previous module content including neurodynamics. Special attention will be paid to the assessment and management of lumbar and cervical instability, introduction to grade V (manipulations/high velocity thrust) of the spine, deepening of theory and practice associated with pain mechanisms particularly the management of central nervous system and sympathetic nervous system pain mechanisms. • Advanced Clinical Reasoning and its application to patient centred management. • Relevant theoretical background of selected clinical patterns, particularly lumbar and cervical spinal instability, neurophysiological pain mechanisms. Cervical instability assessment and management, grade V (manipulation – HVT) techniques and safety. Vascular assessment and dysfunction.

6.4 IMTA Level 3

Module Title	Level 3 – Integrating Approaches
Level of Learning	7
Credit Points (ECTS)	9
Indicative Summative Assessment **Components & Percentage Weightings**	This module is part of the third study year and draws on the module research as well as on the self directed tasks to complete the study program in order to prepara for final assessments of the educational programme: - Case based skills examination – 100% - Mentored Clinical Practive 3 – 100% - Patient assessment, clinical reasoning and treatment over 2 sessions – 100% - Written presentation of a clinical case report - 100% - Verbal presentation of the clinical case report 10% self evaluation, 30% peer evaluation, 60% teacher evaluation - Learning Report: 50% self evaluation – 50% teacher feedback
Pre-Requisite	Succesful completion of the second study year of the educational programme of IMTA Teaching Faculty NL (Physiotherapists who have completed an IMTA Level 2b course at another location than the Netherlands may need to complete the assessments and assignmentss of the previous study years, before being accepted in the third study year).
Delivery Pattern	Usually 3 weeks of 5 days with self directed and directed learning between contact time
Course Language	Dutch, if this would not be possible: English
Contact hours	105 hours, excl. Skills training 7 hours
Self-study time	110 hours
Essential Reading	• IMTA Module Handbook (provided by teacher) • Selected articles as a preparation on the modules (see Studiehandleiding II / Study logbook & Diary) • Piekartz van H. Bryden L (2000) Craniofacial Dynfunction and Pain. Elsevier-Butterworth Heinemann, Edinburgh • Sluka KA ed. (2009)Mechanisms and Management of Pain for the Physical Therapist. IASP Press, Seattle • Butler DS, Moseley GL. (2003) Explain Pain. Noigroup Publication, Adelaide • Lee D. & Lee L.J. (2010) The Pelvic Girdle, An Integration of Clinical Expertise and Research. 4th ed. Churchill Livingstone, Elsevier. Edinburgh These publications will be used between course weeks to broaden and deepen learning. The Study Logbook & Portfolio (Studiehandleiding II) will guide learners through the tasks which will need to be fulfilled between course weeks
Recommended Reading	See literature list (Chapter 8) • Sahrmann S & Associates (2011) Movement System Impairment Syndroms of the Extremities,, Cervical and Thoracic Spines. Elsevier-Mosby, St Louis • Sahrmann S: Diagnosis and Treatment of Movement Impairment Syndromes, St Louis, 2002, Mosby • Addison D (2014) Management of Hip Disorders. Chapter 7, in Hengeveld E, Banks K (ed.) Maitland's Peripheral Manipulation – Management of Musculoskeletal Disorders. 5th Ed. Elsevier/Churchill Livingstone, Edinburgh

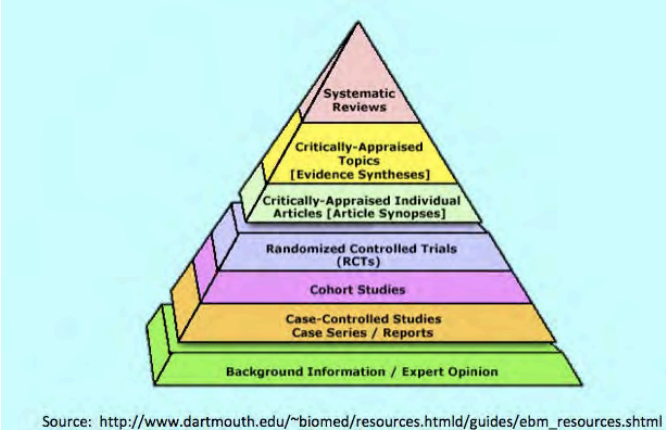
	• Waddell G. (2004) The Back Pain Revolution, 2nd Ed. Elsevier-Churchill Livingstone, Edinburgh • Main C and Spanswick CC (2000) Pain Management – An Interdisciplinary Approach. Elsevier-Churchill Livingstone, Edinburgh

Module Aims	This module enables the learner to develop a conceptual understanding of a range of complementary conceptual approaches to the management of NMS dysfunction. It explores the management of complex case presentations utilising an integration of conceptual approaches, within an evidence base framework. It facilitates the learner's analysis, evaluation and synthesis with a critical awareness of complex case presentations. The module aims to utilise learners clinical experience and to facilitate a self-directed approach to knowledge and practice development.
Module Learning Outcomes	By the end of this module the learner will be able to • Discuss, critically appraise and integrate a range of relevant concepts approaches appropriate for the management of complex NMS dysfunction. • Demonstrate advanced and innovative clinical reasoning to facilitate effective and pertinent problem solving for complex NMS presentations. • Critically appraise, justify and reflect upon communication, examination and treatment techniques in the management of complex patient presentations. • Critically appraise, synthesise and apply pertinent literature to support the management decisions of complex patient presentations. • Demonstrate innovative, sensitive and relevant patient handling skills.
Indicative Module Contens / Topics	• Dynamic control and muscle imbalance theories, movement analysis: Shoulder instability theory, examination and management. Upper quadrant nerve entrapment. Lower quadrant dynamic/motor control problems, including sacroiliac, pelvic girdle and hip dysfunctions • Cervical instability and manipulation review • Craniomandibular dysfunctions, cranium and cranial nerve anatomy, examination nd management. Cervicogenic headaches theory, examination and management. • Chronic pain theory and management: Biopsychosocial paradigms, behavioural change, cognitive behavioural approaches integrated in /complementary to manual therapy approaches, working in a multi- and/or interdisciplinary setting. • Revision of drafts of clinical case reports (during last study week)

6.5 Research

Module Title	**Research in Practice**
Level of Learning	7
Credit Points (ECTS)	5
Indicative Summative Assessment **Components & Percentage Weightings**	3x Critically Appraised Paper (CAP): 2 out of 3 CAPs have to be evaluated as satisfactory Clinical Case Report – written presentation (100%) – verbal presentation (10% self-evaluation; 30% peer evaluation, 60% teacher evaluation)
Pre-Requisite	Undergraduate Education in Physiotherapy with basic theoretical and practical knowledge of research processes, paradigms and purposes
Delivery Pattern	1 day contact time per study year: research A, B and C during study years 1, 2 and 3 respectively with additional self directed learning
Course Language	Dutch, if not possible the course language will be English
Contact hours	Contact time: 21h
Self-study time	Self study: 100h
Essential Reading	Module Reader Research (to be downloaded from the Nexus Study Platform), course hand outs
Recommended Reading	• DePoy E & Gitlin LN (2015) Introduction to Research. Understanding and Applying Multiple Strategies. 5th ed. Elsevier, Mosby, St. Louis • Crombie IK (1996) The Pocket Guide to Critical Appraisal. BMJ Publishing • Greenhalgh T (2014) How to Read a Paper. 5th ed. Wiley Blackwell-BMJ Books, Chichester • McEwen, I., Ed. (2009). Writing Case Reports. A How-To Manual for Clinicians. 3rd ed. American Physical Therapy Association (APTA), Alexandria, USA *A bibliography of other background literature is provided at the end of this chapter. It is suggested that learners select the literature based on their specific needs.*

Premise to this module	The module "Research in Practice" is an essential part of the IMTA educational programme in the Netherlands. Based on the "Brickwall model" of clinical reasoning this module supports learners to formulate research questions based on clinical observations, as well as to search for, find and critically appraise the best available evidence ("evidence informed practice") to underpin daily clinical descion processes.
Remark reg. CAPs and Clinical Case report	Clinical case reports and clinical case studies build the basis for cohort studies and RCTs, within the hierarchy of level of evidence as defines by Sackett et al (1998). The observations of well informed clinicians may give impulses for innovative future research endeavours, provided they take the time and make efforts to publish a clinical case report / clinical case studies / small case series in sufficient detail. Also, Critically Appraised Papers build the basis for Critically Appraised Topics (literature studies), which eventually may support clinician in making a clinically relevant literature review (see fig. below).

	 Source: http://www.dartmouth.edu/~biomed/resources.htmld/guides/ebm_resources.shtml
Module Aims	This module enables the learner to develop an in depth understanding and appreciation of research processes, their relevance to clinical practice and the contribution to the body of knowledge of manipulative physiotherapy, as well as the relevance of clinical observations in the instigation of research processes. It facilitates learners to develop skills to critically appraise, analyse and evaluate scientific reports and to apply relevant scientific information into clinical practice in an autonomous manner (Evidence Informed Practice). Furthermore it enables learners to contribute to research relevant to manipulative physiotherapy by writing clinical case reports. (as an exception learners may request to write a short literature review or Critically Appraised Topic (CAT) on a topic relevant to manual therapy)
Module Learning Outcomes	By the end of the module the learner will be able to: • Demonstrate critical understanding of common quantitative and qualitative research designs with a critical evaluation of ethical considerations relating to human research. • Select, critically appraise and discuss scientific reports and apply the information to clinical practice • Analyse, synthesise and present findings from scientific reports in a coherent and systematic manner • Present a clinical case report of a patient treated by the learner and discuss the information and decisions made during the process in the context of current best available scientific evidence and give specific suggestions for clinical reasoning processes and further scientific research
Content	Research A: • Critical appraisal of the purpose of research processes and the definition(s) of research • Paradigms, epistemology of research, theory development and testing • Qualitative and quantitative research methods, data collection methods, data interpretation (statistics in quantitative and grounded theory in qualititative research) • Evidence Based Practice, levels of evidence and the role of clinical reasoning and observations • Validity and rigor of qualitative and quantitave research methods • The role of Critically Appraised Papers (CAPs) and Clinical Case Reports in "Evidence Informed Practice" • Clinical Prediction Rules, the role of Concepts of Validity / Reliability in research and clinical practice - discussion, clinimetrical instruments
	Research B: • Defining questions to find relevant articles in relevant electronic databases (PICO method) • Revision of search strategies in various relevant databases (PubMed, CINAHL, PEDro etc.)

	• Systematic set up of Critically Appraised Papers • Discussion of Critically Appraised Papers – the relevance of comparing and contrasting discussion points (versus descriptions), integration of related research findings, recommendations for clinical reasoning and/or further research. Various scoring methods related to the kind of research (e.g PEDro for RCT, STARD for diagnostic criteria etc.)
	Research C: • Role, purpose and setup of clinical case reports as a distinction to clinical case studies • Discussion of clinical case reports – the relevance of comparing and contrasting discussion points (versus descriptions), integration of related research findings, recommendations for clinical reasoning and/or further research • Academic writing, hierarchy of scientific reports, reference methods • Proposal for a clinical case report of a client treated by the learners in their clinical practice
Indicative learning, teaching and assessment activities	Teachers will provide the learner with appropriate learning activities, support and guidance. The learner will be required to undertake activities of directed and self-directed learning. Tutor led activities will include activities such as • Presentations • Setting tasks • Providing support to learning • Giving feedback Tutor directed activities will include activities such as • Group discussions and group work • Peer assessment activities • Appropriate support during self directed learning activities The learner will be expected to carry out independent study / self-directed learning to deepen and complement their learning and development. These activities will include: • Keeping a module logbook / reflective study diary • Performing literature searches in libraries and electronic databases • Reading relevant background information to deepen understanding • Writing reports as for example Critically Appraised Papers (CAPs) and a clinical case report. Formative assessment: A variety of types of formative assessment will be used, such as: • Setting tasks, questioning, debate on for example purpose of research, levels of evidence, clinimetric and validity of examination and treatment techniques,literature search, defining search strategies, defining research questions and topics for clinical case reports • Peer assessment in small groups of written and/or verbal presentations of CAPs and definition of clinical case study topic / format of the clinical case report Summative assessment: • Critical appraisal of scientific reports (CAPs) and discussion of the research methodology and the applicability in clinical practice. Learners are requested to present 3 different CAPs (see course calendar for the deadlines). 2 out of 3 CAPs will need to be assessed as satisfactory • Clinical Case Report – written presentation • Verbal presentation of the clinical case report
Remark / verbal presentation case report	For the verbal presentation of the clinical case report a small reader is available to prepare, plan and execute the presentation, incl. the use of various audio visual aids. (Practicing verbal presentations will take place during week 3 / IMTA Level 3).

Note that this additional information may be subject to change from year to year.

6.6 Mentored Clinical Practice

Module Title	Mentored Clinical Practice (MCP) *(„stage")*
Level of Learning	7
Credit Points (ECTS)	8
Indicative Summative Assessment **Components & Percentage Weightings**	(Mentored Clinical Practice sessions during IMTA Modules Level 1, 2 and 3 afre formatively assessed) • MCP 1: 100% • MCP 2: Evaluation of performance during the periods of mentored clinical practiceAssessment of 2 consecutive patient sessions within the setting of the clinical practice • MCP 3: 100%
Pre-Requisite	After having completed about ¾ of the study program over each study year, the learner can participate in the module MCP for the study year concerned
Delivery Pattern	In the Netherlands learners are required to follow in each study year a period of mentored clinical practice in a mode of1:1 contact time with a clinical mentor, appointed and approved by the IMTA Teaching Faculty NL Details of suggested time distribution is described in the IMTA Teaching Faculty NL documentation on Mentored Clinical Practice ("stage")
Course teachers	• IMTA teachers • IMTA assistant teachers who have completed an IFOMT recognized OMT educational programme, • Other clinical mentors recognised by IMTA Teching Faculty NL[3]
Course Language	Dutch
Contact hours	MCP 1: 32 hours contact time MCP 2: 48 hours contact time MCP 3: 64 hours contact time Patient examination over 2 sessions: 6 hours
Self-study time	50 hours
Essential Reading	All references and course handbooks as required during the programme
Documents	The IMTA Teaching Faculty NL provides a"stagedocument" in which the learning objectives have been defined per MCP. Also per MCP period learners are required to complete a document of reflection, which is integrated into the "stagedocument". Copies of these reflections have to be sent to the MCP coordinator of the educational programme within 7 days after completion of the given phase of MCP .
Remarks	This MCP 3 has to be successfully completed before a learner can fulfil the requirements of IMTA's final examination of the clinical expert module (study year 3 – IMTA Level 3)

[3] IMTA recognised clinical mentors are physiotherapists who have successfully completed an IFOMPT recognized OMT educational programme and have demonstrated an indepth understanding of the clinical work based on the prinrciples of the Miatland Concept of Manipulative Physiotherapy. Participation in educational trainings for clinical mentors is mandatory for all IMTA recognised clinical mentors and is part of the continuous professional development requirements of IMTA Teaching Faculty NL. These trainings may be organised by IMTA Teaching Faculty NL and/or other educational institutions.

Premise to this module	Mentored Clinical Practice (MCP) is an essential part of this educational program and adheres to the requirements as defined in the IFOMPT Standards document (2008). It provided a mechanism for promoting deeper learning and developing as braoder knowledge bse and skills required for higer level clinical reasoning, critical thinking and advancing patient casre
Module Aims	This module enables the learner to critically appraise and apply the skills, knowledge and attributes developed during the educational programme into the clinical setting, which encompasses complex and unpredictable and/or specialised contexts.
Module Learning Outcomes	By the end of the module the learner will be able to: • Carry out comprehensive examination and effective management procedures based upon critical appraisal of current best evidence and best practice, as well as the application of a comprehensive knowledge base of manipulative physiotherapy (OMT), which includes clinical, biomedical and behavioural sciences • Demonstrate advanced communication, documentation (incl. informed consent), clinical reasoning skills as well as practical skills with sensitivity and specificity of handling • Explore and discuss the application of different conceptual approaches in patient management • Critically reflect upon practice and identification of future learning needs
Indicative Learning	• Application of manipulative physiotherapy skills and knowledge, including relevant scientific evidence at clinical expertise level with regards to subjective examination, physical examination, (patient-centred) communication, reflection, clinical reasoning, planning, application and progression of treatment, documentation and reporting, integration into overall NMS-management in complex and unpredictable and/or specialised areas of clinical practice • Professional intra- and/or interdisciplinary communication with colleagues, other professionals and institutions involved in clinical practise. • Further details are described in the Document of the IMTA Teeaching Faculty regarding Mentored Clinical Practice ("Stagedocumenten")
Organisational aspects, Clinical Mentor led activities & self-directed learning	• Clinical mentors will provide the learner with appropriate learning activities, support and guidance. The learner will be required to undertake activities of directed and self-directed learning • Learners should work directly with at least 4 patients on a course day of 8 hours, which are directly observed by the clinical mentor • Ideally, learners should be enabled to perform a first assessment of a minimum of 1 patient per course day • The time allocated to direct patient contact should not exceed 1.5h for the 1st session and 1h for subsequent sessions • Sufficient time should be allocated for giving formative and summative feedback, answering questions, guided reflection and presentation as well discussion of tasks, which may have been given after each course day • Preferably learners are given the opportunity to follow up with the same patients in subsequent sessions • The rest of the contact time may be used for case analysis with the mentor, mock scenorios / mock practica exams prepared and supervised by mentors, some sessions (maximally 2 per course day, ideally maximally 30' per patient) may be used as demonstration sessions by the mentor. • The learner will be expected to carry out independent study / self-directed learning to deepen and complement their learning and development. These activities will include: - Keeping a module logbook / reflective study diary - Reading relevant background information to deepen understanding of patient management

	- Writing reports • Planning, reporting and reflection of the course day and the overall period of mentored clinical practice should be done by the learner during the self study time
Preparation for this module	• Prepare the IMTA MCP-documents for each period of mentored clinical practice (e.g. reflection on learning objectives) and discuss these beforehand with the clinical mentor • It is required that the learners are familiarised with written documentation and planning according to the guidelines of the IMTA educational program *(Problem Oriented Medical Records (POMR) – SOAP notes with inclusion of HOAC*), incl. IMTA Clinical Reasoning and Planning Forms. • The IMTA Clinical Reasoning and planning forms may be used during the first period of MCP, however it is expected that the learners are capable of planning and recording without any additional forms (except body chart) during assessment sessions. • Learners should be informed about the internal organisation (e.g dress codes, confidentiality issues) at the venue of mentored clinical practice and adapt to these • Learners bring the material, which may be needed for assessment of patients (Body charts, IMTA clinical reasoning forms, reflexhammer, goniometer, measuring tape etc.)

6.7 Screening for Biomedical Disease

Module Title	**Screening for Biomedical Disease**
Level of Learning	7
Credit Points (ECTS)	1
Indicative Summative Assessment **Components & Percentage Weightings**	Summative: As part of the theoretical examinations in Study years 1 and 2
Pre-Requisite	As in the other modles
Delivery Pattern	Throughout IMTA Level 1, 2a, 2b , as well as with essential reading & tasks as set out in the study logbook
Course Language	n.a.
Contact hours	Throughout level 1, 2a, 2b Self directed learning with the publications as mentioned under "essential reading"
Self-study time	25
Essential Reading	• Boissonault W (2010). Primary Care for the physical therapist. Examination and Triage. 2n ed. Elsevier – Saunders, St. Louis • Goodman CBC, Snyders TEK (2012) Differential Diagnosis for Physical Therapist: Screening for Referral. 5th ed. Elsevier-Saunders, St. LouisSelected articles, to prepare and deepen learning • (Handout: Screening biomedical disease)
Recommended Reading	• Greene G: Red flags: essential factors in recognizing serious spinal pathology, *Man Ther* 6(4):253–255, 2001 • Grieve GP: The masqueraders. In Boyling JD, Palastanga N, editors: *Grieve's Modern Manual Therapy*, ed 2, Edinburgh, 1994, Churchill Livingstone, ch 63, pp 841–856 • Sano H, Hatori M, Mineta M, et al: Tumors masked as frozen shoulders: a retrospective analysis, *J Shoulder Elbow Surg* 19:262–266, 2010a

Premise	It is increasingly important that physiotherapists integrate a screening of possible biomedical disorders into the analysis and diagnostics of (movement)dysfunctions, which may need to be referred to another (medical) practitioner. This is of particular importance in those countries where physiotherapist work with patients in "direct access", however also in cases where patients are treated on medical referral it is possible that the clinical presentation of a patient changes in the period between the visit with the doctor and the first session with the physiotherapist In the Netherlands physiotherapists work with the questionnaire for direct access ("DTF") to underpin desisions to continue with physiotherapeutic actions or to refer the patient to other clinicians. It is feasible that this questionnaire gives information with regards to possible contraindications to physiotherapeutic exmination and treatment procedures. However it is possible that the clinical presentation of a patient indicates a dominant movement related disorder initially, which may become an atypical, incosistent presentation over the course of the first few sessions, as for example symptoms increase, become less and less movement dependent or atypical

	reactions in reassessment procesdures, or in rest and activity. Hence, within the clinical reasoning prcoesses and procedures of the "Maitland® Concept" it is recommended, in addition to the questions of the "DTF"-questionnaire, to integrate specific questions related to specific function systems of the body in the subjective examination. Also some specific testing during the physical examination procedures may support hypotheses about possible biomedical dysfunctions of bodily systems.
Module Aims	Learners develop screening questions as well as some selected examnination procedures related to specific body systems which may indicate biomedical dysfunctions of a patient, for which a referral to a medical practitioner may need to bee considered.
Module Learning Outcomes	Learners demonstrate to integrate, reflect upon, analyse purposeful questions, and if necessary, some selected test procedures related to the screening of bodily function systems indicative of biomedical disease. They make deliberate informed decisions regarding referral to th appropriate medical practitioner
Indicative module contents	Contents are related Functionsystems as outlined by Boissonault (2010) and Goodman & Snyder (2012): - Cardiovascular functionsystem - Pulmonary functionsystem - Gastro-intestinal functionsystem - Uro-genital functionsystem - Peripheral vascular functionsystem - Endocrinological functionsystem - Neurological functionsystem - Integumentary functionsystem (barriere system – protection outer influences – related to skin, hair, nails, glands,nervs) - - Rheumatological functionsystem Psychiatric (psychological) functionsystem - General: selfperceived of general health - General: indications of neoplasmata

6.8 Reflective Learning

Module Title	**Reflective learning**
Level of Learning	7
Credit Points (ECTS)	1
Indicative Summative Assessment **Components & Percentage Weightings**	Learning Report: reflexion and analysis on the learning experiences during the years of the educational programme and the recognition of future needs of learning (50% self analysis, 50% teacher feedback)
Pre-Requisite	It is expected that the learners reflect on their learning process throughout the educational program. This included contact time during modules, MCPs en clinicl skills days, as well as self directed learning with peers and individually, as well as observations during daily clinical practice.
Delivery Pattern	Self directed learning, with the aid of the Study Logbook & Diary and selected literature
Course Language	n.a
Contact hours	n.a
Self-study time	40
Essential Reading	Study Logbook & Diary ("Studiehandleiding II")
Recommended Reading	Fish, D. and C. Coles (1998). Developing Professional Judgement in Health Care. Oxford, Butterworth-Heinemann Schön, D. A. 1983. The Reflective Practitioner: How Professionals Think in Action. Aldershot: Arena

Premise	Learning is an individual process. It may not be necessarily only learning new aspects, but during the processs also much reorganization of knowledge is taking place (Higgs, 1992). A knowledge base contains different areas as "personal knowledge", "professional craft knowledge" and "propositional knowledge" (Higgs & Titchen, 1995). Learning is also described as the process of "the changes which take place in thinking, feeling and actions" (Brockbank & McGill, 1998). One of the most important aspects of learning processes is the personal knowledege base, as everything which is borught in into a situation will influene the way show someone epxriences the world out of emotional and coginitve perspectives (Boud & Walker, 1994). This individual learning process may have many implicit elements, however if they are recorded regularly (e.g in a study diary) and reflected upon, it become a more explicit process, in which progress is monitored as well as action can be taken upon future learning needs. By reflecting on the learning process during this educational program, learners broaden and deepen their roles as "Professional" and as "Clinician-Scholar": *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 PhysicalTherapy as a profession.* *IFOMPT Standards Document, 2008. Page 7* *See also Chapter 9 of this document*
Module Aims	In order to deepen and broaden the attitude of a "reflective practitioner", learners reflect upon and analyse their knowledge base during the educational process, considering their knowledge base, skills and attributes and/or personal knowledge base, professional craft knowledge base and propositional knowledge. They make use of the "strands of reflection (Fish & Coles, 1998), relating to the knowledge base at the following stages of the edicational programme: • at the initial stages of the educational program – recognizing learning needs and the level of knowledge and expertise • during the educational program, with particular attention to critical moments • at the end of the educational program , with a comparison to the initial phase and the role of critical moments to arrive at the knowledge base at the end of the program • establishment of future needs for learning as well as how the gained / reorganized knowledge may be use in future

7 Summative Assessments & Assignments

During the educational programme ongoing formative and progressive summative assessment takes place to monitor learning outcomes.

The summative assessments provide learners and teachers an overview if the learning outcomes and competencies for the given modules have been achieved.
Formative assessments during the program support learners to estimate their progress of learning and to define specific, individual learning needs.

It is recommended that learners include the feedback and feedback forms relating to formative and summative assessments into their study logbook / - portfolio.

7.1 Overview Summative Assessments

- The assessments are organised and linked in such a way, that they prepare for the final clinical and theoretical examinations of the last stud year (Clinical Case Report; Assessment, treatment and clinical reasoning of a patient over 2 therapeutic sessions):
    - For example during the first study year and the first semester of the second study learners are requested to present a clinical record of a patient treated by them in clinical practice. This is also one of the requirements of the periods of mentored clinical practice. This serves the reflection and promotion of the learners' clinical reasoning processes and a foundation is laid for the clinical case reports, which will be presented during the last study year

Table 7.1: Overview of summative assessments per study year

Study year 1	**Study year 2**	**Study year 3**
Patient records 1, 2, 3	Patient record 4	Clinical Case Report • *written presentation • verbal presenttion
	Critcally Appraised Paper (CAP) 1, 2	Critically Appraised Paper 3
Skills examination	Case Based Skills Examination	Case Based Skills Examination
Theory Examination A	Theory Examination B	
Mentored Clinical Practice I (MCP I)	Mentored Clinical Practice II (MCP II), incl. Examination of 2 consecutive sessions with a patient (first analytical assessment / retrospective assessment, treatment, planning, reassessments)	Mentored Clinical Practice III (MCP III)
		*Patient examination during 2 sessions after successful completion of MCP III
		Learning Report

*Final examinations

- Each assessment needs to be passed, in order to be admitted to the final examinations.

- If a summative assessment is evaluated as unsatisfactory, in principle the learner may proceed with the educational programme. However the following assessments have to be completed and evaluated as satisfactory before they can proceed to the next assessment:
  - Skills examination Study Year 1 → Skills examination Study Year 2 → Skills examination Study Year 3
  - Theory examination Study Year 1 → Theory examination Study Year 2
  - Patient record 1 → Patient record 2 → Patient record 3 → Patient record 4
  - MCP 1 → MCP 2 → MCP 3
  - MCP 3 → Final examination with a patient (2 sessions)
  - Written Clinical Case Report → Verbal Presentation of Clinical Case Report

7.1.1 Patient records (& relation to Clinical Case Report)

- During the first study year learners are requested to complete a patient record. This will be peer assessed and subsequently teacher assessed.
- These patient records serve the reflection of the prcodural reasoning and reflection of this concept of manipulative physiotherapy. They are a means to monitor learning of precidural reasoning and planning in the first study year, but particularly in the second (and third) study year, learners are requested to execute, reflect and plan inadequate detail, as this will be required in the clinical case report, which needs to be completed at the end of the first semester of the third study year
- The following is required:

  a) **Patient record 1**: Subjective examination of a patient, with the use of the planning sheet as provided by the educational institution. This reflects IMTA's planning & reflection sheet of patient assessment and treatment.

  b) **Patient record 2**: First session (subjective examination, reflection & planning of physical examination, treatment incl reassessment; planning of the 2nd session, with the use of the planning sheet as provided by the educational institution. This reflects IMTA's planning & reflection sheet of patient assessment and treatment.

  c) **Patient record 3**: Documentation of 2 sessions, the same as described und b)., incl. planning of a third session, with the use of the planning sheet as provided by the educational institution. This reflects IMTA's planning &reflection sheet of patient assessment and treatment.

  d) **A 4th patient record** of 6-7 sessions needs to be completed at the beginning of the second study year. Particularly this record needs to be delivered with attention to sufficient detail to the findings, the reflection and planning of subsequent procedures as this will be essential as a preparation for the clinical case report in the last study year.
  After completion of this record, learners discuss this record with 3-4 peers first in a *self directed leaarning* setting and indicate which information/feedback of the peers have led to refinement of the record.
  Once this feedback has been integrated, the document will be sent to the teacher. Deadline and the teacher concerned will be listed on the detailed course calendar.

- Marking per patient record:
  60% - 69%: satisfactory
  70% - 79%: good
  80% - 89%: very good
  ≥ 90% excellent

7.1.2 Skills examinations

- Examination and treatment skills will be assessed once per study year.
  - Skills examination 1: during the 4th study week of the IMTA level 1 module
  - Skills examination 2: during the second week of the IMTA Level 2A module
  - Skills examination 3: during the second week of the IMTA Level 3 module

- Learners will first apply a number of techniques on peers, subsequently they will also apply a certain number of techniques on the teacher/examiner.
- In the first study year a skills based examination takes place within a smaller context of clinical reasoning, while in the second and third study years case based skills examinations will take place in which learners are requested to select and perform examination and treatment techniques within a (given) clinical context (case based skills examination).
- During the skills examination 1 the teacher will give a short clinical example for which an examination or treatment technqique needs to be demonstrated. Techniques are applied on a peer. At least one technique will be performed on the examiner.
- During the skills examinations 2 and 3 a short clinical case will be given to the learner, which he/she prepares in a given time (written preparation). This preparation will be discussed with the examiner, after which the examiner selects some examination or treatment techniques, which have to be demonstrated on a peer.
  Additional techniques according to the lists as mentioned above may need to be demonstrated as well.
  Furthermore at least one technique will be applied on the examiner.
- The following observation criteria will be applied:
  - Position of the patient
  - Position of th therapist
  - Localisation of forces
  - Application of forces
  - Information, communication to the model
  - Clinical Decision Making: selection and dosage of treatment techniques (Study years 2 and 3)
- Lists with an overview of skills per study year are made available on the Nexus Study Platform.
- Note that the skills examinations in every study year may also include skills of the previous study year(s).
- All skills examinations have to be evaluated as satisfactory.
- If a skills examination has been evaluated a unsatisfactory, repetition of the examination may take within 4-6 months. The 3rd skills examination has to take place before the completion of the 3rd phase of Mentored Clinical Practice (MCP III).
- Marking:
  60% - 69%: satisfactory
  70% - 79%: good
  80% - 89%: very good
  ≥ 90% excellent

7.1.3 Theory examinations

- Theory Examination 1 will take place during the 4th week of IMTA Level 1 Module.
- Theory Examination 2 will take place during the 4th week of IMTA Level 2B Module.
- The examination will contain multiple choice questions, as well as open questions
- Topics are related to the application of theoretical (propositional) knowledge into daily practice.The most relevant topics are listed in the following table 7.2:

Theory Examination 1:	**Theory Examination 2:**
• Principles Maitland Concept (procedures examination, planning, reflection, clinical reasoning, selection & progression of treatment techniques) • Selfmanagement, compliance, gbehavioural change, motivation of patients • Neuroanatomy of spine • Neurodynamicsa (biomechanics, physiological aspects as e.g physiological pressure gradients) • Neurophysiological pain mechanims, with particular emphasis on peripheral neurogenic processes, sensitization, primary & secondary hyperalgesia, allodynia. Neurogenic contribution to inflammatory processes	• Same topics as theory examination 1 • Manipulations of the spine: indications, contraindications, procedures of setting up and performing manipualtions, effects of manipulations, premanipulative screening, clinical perdication rules & clinical decision making reg. Selection of manipulations • Neurophysiological painmechanisms, with particular emphasis on peripheral nociceptive, peripheral neurogenic mechanisms (central NS mechanism, autonomic NS mechanisms). – physiological processes, clinical presentations /pattern and their role in clinical decision making. Neurogenic contribution to

• General pathobiology with regards to clincal practice, as discussed during the course. For example dizzyness, osteoarthritis, specific low back pain, non specific low back pain, screening biomedical disease – functionsystems of the body • Research – definitions and goals of research; the role of clinical observation in research; levels of evidence; validity in quantitative reseaarch, trustworthniess in qualitative research. Clinical application of tests with low reliability, specficity,sensitivity.	inflammation, ischemic & neurogenic mechanisms with peripheral nociception • Biomechanics of the spine, incl. relationship of cervical spinestructures and stability testing of the cervical spine • Neurodynamics: tests sequences, mechanics, physiology, pathophysiolog, hypotheses on effects, evidence • Principles van compression, metabolism of cartilage, osteoarthritis – etiology, treatment, evidence • Screening biomedical disease – bases on a patient case • Lumbale syndromes: specific LBP, red flags, non specific LBP, lumbar instability, lumbar stenosis, • Patello femoral pain syndrom • Cervical instability, cervical myelopath • Cervicogenic headache: relevant neuroanatomy as, relationship to spine. Contributing factors. Evidence

- Marking of the theory examinations:
  60% - 69%: satisfactory
  70% - 79%: good
  80% - 89%: very good
  > 90% excellent

7.1.4 Mentored Clinical Practice, Patient Sessions-1

- Supervised sessions with patients *("Mentored Clinical Practice", MCP)* have always been an important part of the educational programme in this concept of manipulative physiotherapy. During this programme learners assess and treat patients during course weeks 2, 3, 4, 5, 6, 7, 8, 11 under the mentorship of the teacher (formative assessment). Furthermore learners complete a period of clinical practice with a clinical mentor, who has been appointed by the IMTA Teaching Faculty NL (summative assessment).

- The International Federation of Orthopaedic Manual Physical Therapy (IFOMPT) recommends a minimum of 160 hours of mentored clinical practice.

- In this educational programme the following number of hours is allocated to mentored clinical practice (table 7.3):

Patient sessions during the course modules, under mentorship oft he teacher(s)	50 hours
Patient demonstration sessions by the course teachers	42 hours
Mentored clinical practice I (4 days)	32 hours (excl. preparation, reflection in self directed learning)
Mentored clinical practice II (6 days)	48 hours (excl. preparation, reflection in self directed learning)
Mentored clinical practice III (8 days)	64 hours (excl. preparation, reflection in self directed learning)

- Each period of MCP will be evaluated.
- All evaluation forms are integrated in the Document for Mentored Clinical Practice.
  For each period as different evaluation form needs to be used, as progressive feedback criteria are used during the progression of the education
- IF MCP II and/or MCP III are evaluated as unsatisfactory, they need to be repeated
- During MCP II next to the performance during the clinical practice, also a 2 consecutive sessions with a patient will need to be assessed (first and second session)
- The performance of MCP I, MCP III will be marked 100%
- The performance of MCP II will be marked as follows:
  - Patient sessions – 40% of total marking
  - Performance during MCP II – 60% of total marking
- Marking:

60% - 69%: satisfactory
70% - 79%: good
80% - 89%: very good
> 90% excellent

Further information on MCP: in Document MCP ("Richtlijnen Stagebegeleiding")

7.1.5 Final Patient Sessions (Patient Sessions - 2)

- The final patient sessions (-) will be examined by 2 examiners who have been appointed and trained by the IMTA Teaching Faculty NL.
- If possible one of the examiners will be a clinical mentor, where the learner has completed a period of MCP. However this cannot be guaranteed.
- The patient sessions take place over 2 consecutive sessions
  - session 1: duration maximally 60 minutes (50 minutes contact time with the patient; 10 min. Reflection. If the contact time lasts up until 60', the reflection time will be shortened accordingly. This will be followed by a discussion with the examiners. The topics of dicsussion will be the clinical reasoning/decision making process, applied theoretical (propositional) knowledge and scientific evidence underpinning clinical practice.
  - session 2: duration 40 minutes, followed by 20 minutes discussion with the examiners: The learner provides a record of the first session, reflection (with IMTA clinical reasoning and planning form) and complete written plan for the 2nd session, incl. forward reasoning for the third session. It is expected that the learner will give a concise overview of the patient's problem, the management with short-term and long term goals and a well informed prognosis.
- Both examiners will mark the sessions independently with the evaluation form concerned. After the second session the avarage mark between both examiners will define the final mark of the examination.
  In case of a difference of more than 15% between the examiners, the coordinator of the educational programme has tob e consultes before a definite mark is provided.
- The learner will receive feedback on the same day on the second patient session took place.
- Marking (based on the final competencies for MCP III, as described in the document of MCP:
  > 90% excellent
  80% - 89%: very good
  70% - 79%: good
  60% - 69%: satisfactory
  0% - 59.9%: unsatisfactory
- If the examination is marked as unstaisfactory, the examination needs tob e repeated. Examiners will be in principle one teacher of the programme and a second examiner.

7.1.6 Critically Appraised Papers (CAPs) (& relation to Clinical Case Report)

- A Critically Appraised Paper (CAP) is a structures summary, including a discussion on a scientific article.
- A CAP should serve the development of the attribute and skills for the facilitation of Evidence Based (informed) Clinical Management
- Within the educational programme as described in this document to writing of a CAP serves also as a preparation for the Clinical Case Report, which will be written during the final study year.
- During the educational programme learners will write 3 Critically Appraised Papers, of topics which are clinically relevant to them. Usually the article is selected from an electronic database as for example PubMed, CINAHL, Cochrane etc.
- The CAP will be written according to the format of the educational programme. Most points can be listed as so called "Bullet point". However the discussion will be written in essay format and needs to incorporate other relevant scientific liteture to underpin the discussion.

- It is recommended that learners get accustomed to "discussion" as a process of "comparing-contrasting-synthesising", rather than plain "describing" and "providing opinions". Also it is required that the discussion is formulated in constructive language.
- During the educational programme learners are required to send in 3 CAPs to the teacher of the module "Research-in-Practice" according to the deadlines of the details calendar of the programme.
- 2 out of 3 CAPs need to be evaluated as satisfactory
- Marking will take place as "process quality", a progression in quality of the CAPs is present. All 3 CAPs will be evaluated for the final mark, which will dually be ranged between "satisfactory – unsatisfactory"
  If the final mark is unsatisfactory, improvement in the CAPs need to be made until the result is satisfactory.

7.1.7 Clinical Case Report (written document & verbal presentation)

- A clinical case report will be submitted as suitable for submission as an article for a peer reviewed journal. The purpose of a case report is manifold, it should give interested clinicians indications of innovative practice and reasoning and/or intererested researchers suggestions for further research.
  A case report can be considered Evidence Level 4-5 on the scale of levels of scientific evidence as described by Sackett et al (1998)
- Once the case report has been evaluated as satisfactory, the case report will be prepared as a verbal presentation to a group of peers and teachers for the final examination day
- **Format of the written document / case report:**
  - The case report needs to be typewritten with lettersize Arial 10 / Times New Roman 12. Headings and subheadings may be one or two font sizes larger
  - The text has a 1.5-2x distance beween lines; 2.5cm margin on the left, right , upper and lower sides of the paper
  - The report contains minimally 2500, maximally 3500 words
  - The report is written in essayformat. Use of headings and subheadings is recommended
  - It may be useful to include 5-7 relevant (masked) photos of the special aspects of the treatment – a short video may be submitted as well (maximum 10 minutes)
  - Tables may be included and are usually lists of information. It is essential that in the essay text reference is made to the tables and figures.
  - Table captions & numbering: will be placed *on top* of a table
    Figure captions & numbering: are being placed *under* the figure.
    Note that the captions should be brief, concise and to-the-point
  - The case report needs to follow the format as defined at the module "research-in-practice", including the use of references in the text & referencelist (Harvard / Librarian method).
  - The case report needs to include, among others, all relevant clinical information, reflection and planning phases why certain steps will be undertaken and a discussion. It should be noted that all relevant clinical information and the clinical reasoning in the relevant pahses has to be specific and with attention to detail,. The discussion should encompass different issues and it is recommended that learners prepare themselves well ahead in time on "discussion-writing" (in contrast to descriptive writing)
  - It should also be noted that the case report is a description and discussion of a patient, who had been treated by the learner. A case report reflects daily practice and reasoning, while the decisions are often made "in-action" or "about-the action" retrospectively.
    (A clinical case report is NOT the same as a clinical case study/n=1 experiment, where the study design usually has been prepared before any patient encoutner has taken place).
- **Evaluation:**
  - Evaluation criteria are listed on the evaluation form

- Evaluation will take place by the teachers of the programme
- Marking:
  60% - 69%: satisfactory
  70% - 79%: good
  80% - 89%: very good
  > 90% excellent
- If the work has been evaluated as *unsatisfactory*, the learner will receive the evaluation form and
  may also receive the document with comments of the examiner.
  - The learner has the opportunity to return the corrected version of the case report within 4 weeks
  after receival of the feedback.
  - If the case reportin second instance is evaluated as satisfactory (or more), the final mark will be maximally 60%.

- **Submission:**
  - The written case report will be submitted by email to the teacher of the module "Research-in-Practice".
  - Deadline of submission: according to the regulations as pointed out on the detailed course calendar

Verbal presentation of the clinical case report

- On the final examination of the educational programme learners will give a verbal presentation of the clinical case report to a group of peers, 2 teachers and invited guests.
- Before the presentation a short summary of the presentation will be handed out to attendees.
- Learners will bring the presentation material (incl. laptops if planned) themselves and ensure that the equipment is functioning.
- Duration of the presentation 15 – 20 minutes. The exact time will be given by the course coordinators one month before the presentation.
- After the presentation as discussion session and question session of 20-30 minutes takes place with the peers and the teachers
- The evaluation with an evaluation form will be given als follows:
  - self evaluation: 10% of the final mark
  - peer evaluation (at least 3 peers): 30% of the final mark
  - teacher evaluation: 60% of the final mark
- In order to prepare for this presentation learners are requested to give (group) presentation in the first and last study year. These will be formatively assessed.
  Furthermore, as small reader is available with tips on verbal presentation and the use of audio-visual aids.
- **Marking**:
  60% - 69%: satisfactory
  70% - 79%: good
  80% - 89%: very good
  > 90% excellent

7.1.8 Learning Report

- A learning report is a structured summary of the learning process during the participation of this educational programma. It is neither a list of all the learning acivitiesduring the programme, nor a psychoanalytical exercise. It is a reflection on the personal process of learning and how this educational programme has had an influence on the work, the individuals themselves and other issues. It should provide an overiew in changes in "thinking, feeling, actions" or knowledge, skills and attributes. It is recommended to give comparative overview of these elements at the beginning and the end of the educational programme, as well as the description of critical moments during the programme leading to these changes. The report should be completed with an estimate how the programme will influence further work activities and a reflextion of learning needs in the near future and how these will be tackled.

- **Format**
  - The learning report needs to be typewritten with lettersize Arial 10 / Times New Roman 12

- The text has a 1.5-2x distance beween lines; 2.5cm margin on the left, rigt , upper and lower sides of the paper
- The report contains minimally 1800, maximally 2800 words
- The report is written in essayformat. Use of headings and subheadings is possible.

- **Evaluation**
  - Evaluation takes place through self evaluation of the learner (50%) and evaluation of the course coordinator(s) (50%).
  - The course coordinator as well as the learner use the evaluation form as listed in Appendix 2 of this document / evaluation form as filed on the Nexus Study Platform.
  - It is important that the learners make an honest attempt to evaluate their own report. It should be noted that it should be an evaluation of the report and integration of contents of the report should be kept to a minimum and shoud only serve to underpin the evaluation.
  - The average mark between learner and course coordinator will be calculated to final mark the product
  - If case of a difference of more than 20% between self assessment and teacher assessment, a discussion between learner and teacher will take place to define the final mark.
  - Marking:
    60% - 69%: satisfactory
    70% - 79%: good
    80% - 89%: very good
    ≥ 90% excellent

- S**ubmission of the learning report and the self evaluation form**
  - Both documents have tob e submitted by e-mail to the course coordinator or a designated person
  - The self evaluation maybe handwritten or type written. The self evaluatoin has to be signed by the learner.
  - Deadline of submission: as listed in the detailed course calendar

7.2 Conditions of admittance to (final) examinations

All modules have to have been completed, as well as all summative assessments before a candidate van be admitted to the final patient examinations (over 2 sessions) and the verbal presentation of the clinical case report.

7.2.1 Learners who have completed IMTA modules abroad

- Learners who have completed IMTA modules abroad, and who may not have completed the summative assessments in a equivalent manner as to this educational programme, may be admitted to the summative assessments of the study years in which the IMTA Module took place.
- However participation in the research module, as well as in the periods of Mentored Clinical Practice (MCP) may be required, before the summative assessments of the research module and MCP can be taken.

7.3 Deadlines for summative assessments

- Deadlines for summative assessments are included in the detailed calendar of the study programme, which is provided to the learners in the Nexus Study Platform.

- If a learner fails to submit the required work in due time, the summative assessment may be evaluated as unsatisfactory (0 points)

7.4 Evaluation Criteria Summative Assessments

- The evaluation criteria reflect the learning outcomes of the modules as described in Chapter 6 (Moduledescriptions) as well as in Chapter 9 (relationship to IFOMPT Standards)

7.4.1 Evaluation Forms

- All evaluation forms include the criteria, which will be used for the feedback and evaluation of summative assessments.
- It is recommended, that learners work with the evaluation forms to familiarise themselves with the criteria.
- This may be possible by the organisation of practice exams within peer group activities and intervisions.
- All forms, except the evaluation forms of Mentored Clinical Practice, are included in the Appendix 2 of this document. Also they are filed at the Study Platform of Nexus Fysiotherapie Opleidingen.
- The documents for the evaluation of Mentored Clinical Practice are included in the specific document describing the Mentored Clinical Practice

7.5 Repetitions of summative assessments

- Repetition of summative assessments is possible for one time. However exceptions may be made due to individual circumstances.
- Decisions regarding multiple repetitions of summative assessments will be made by the coordinators of the educationsal programme.

7.6 Costs of summative assessments

- All costs for summative assessments are included in the course price.
- However if a learner needs to repeat the final period of Mentored Clinical Practice (MCP 3), or the final patient examination (over 2 sessions), the following examination fees will be levied:
  - MCP 3: € 600.-
  - Patient examination: € 300.-

  These examination fees need to be paid latest one month before the planned examination or MCP. Failing to pay this fee may lead to exclusion of the examination,

7.7 Appeal

- If a learner does not agree with the evaluation of a summative assessment, it is recommended that the learner first reflects on the evaluation and discusses the matter with the teacher who gave the evaluation.
- If, after the discussion with the teacher, no clarification has taken place, the learner may consider an appeal with the Educational Committee of this study programme.
- Appeals, with documentation of reasons for the appeal, have to be sent by registered mail to Nexus Physiotherapy latest within 10 days after the first evaluation has taken place.
- The educational committee will decide if the appeal will be taken into account.
- If an appeal will be taken into account, the educational committee and an independent teacher (IMTA Teacher or another teacher) will discuss the appeal within 6 weeks and will inform the learner about its decision. The decision is definite.

7.8 Evaluation & Feedback Forms

All evaluation forms, except for the forms of MCP, are included in Appendix 2 of this document.

8 CanMEDs Framework

This educational programme has adopted the CanMed Framework of the different Roles in Clinical Expertise, which intially has been defined for medical doctors, however it is also applicable to other clinicians, as for example physio- and manual therapists.
(Reference: Royal College of Physicians and Surgeons Canada (2015) - www.royalcollege.ca/portal/page/portal/rc/canmeds/framework)

1) **Role of Clinical Expert**
This role defines the clinical scope of practice of physiotherapists being educated in this postgraduate program, as outlined in this document
In particular:

„In order to provide high-quality, safe, patient-centred care, clinicians draw upon an evolving body of knowledge, their clinical skills, and their professional values. They collect and interpret information, make clinical decisions, and carry out diagnostic and therapeutic interventions. They do so within their scope of practice and with an understanding of the limits of their expertise. Their decision-making is informed by best practices and research evidence, and takes into account the patient's circumstances and preferences as well as the availability of resources. Their clinical practice is up-to-date, ethical, and resource efficient, and is conducted in collaboration with patients and their families,* other health care professionals, and the community. The Clinical Expert Role is central to the function of physicians and draws on the competencies included in the Intrinsic Roles (Communicator, Collaborator, Leader, Health Advocate, Scholar, and Professional)".

Quotation adapted from www.royalcollege.ca/portal/page/portal/rc/canmeds/framework (permission: pending)

2) Role as a Communicator
In this role manual therapists form therapeutic relationship with their clients/patients and significant others in the social environment of the clients, in order to facilitate gathering and sharing of information to rpovide optimum client-centred health care
In particular:

„Clinicians enable patient-centred therapeutic communication by exploring the patient's symptoms, which may be suggestive of disease or movement disorders, and by actively listening to the patient's illness-experience. Clinicians explore the patient's perspective, including his or her fears, ideas about the illness/disorder, feelings about the impact of the illness/disorder, and expectations of health care and health care professionals. The physician integrates this knowledge with an understanding of the patient's context, including socio-economic status, medical history, family history, stage of life, living situation, work or school setting, and other relevant psychological and social issues. Central to a patient-centred approach is shared decision-making: finding common ground with the patient in developing a plan to address his or her medical problems and health goals in a manner that reflects the patient's needs, values, and preferences. This plan should be informed by evidence and guidelines.
Because illness affects not only patients but also their families, clinicians must be able to communicate effectively with everyone involved in the patient's care".

Quotation adapted from www.royalcollege.ca/portal/page/portal/rc/canmeds/framework (permission: pending)

3) Role as a Collaborator
This role defines the collaboration with other health-care practitioners in order to provide saef, high quality, client-centered care
In particular:

„Collaboration is essential for safe, high-quality, patientcentred care, and involves patients and their families / significant others, physicians and other colleagues in the health care professions, community partners, and health system stakeholders.
Collaboration requires relationships based in trust, respect, and shared decision-making among a variety of individuals with complementary skills in multiple settings across the continuum of care. It involves sharing knowledge, perspectives, and responsibilities, and a willingness to learn together. This requires understanding the roles of others, pursuing common goals and outcomes, and managing differences.
Collaboration skills are broadly applicable to activities beyond clinical care, such as administration, education, advocacy, and scholarship".

Quotation adapted from www.royalcollege.ca/portal/page/portal/rc/canmeds/framework (permission: pending)

4) Role as a Leader

As Leaders, physio-/manual therapy clinicians engage with others to contribute to a vision of a high-quality health care system and take responsibility for the delivery of excellent patient care through their activities as clinicians, administrators, scholars, or teachers.
The CanMEDS Leader Role describes the engagement of all clinicians in shared decisionmaking for the operation and ongoing evolution of the health care system. As a societal expectation, physio/manual therapists demonstrate collaborative leadership and management within the health care system, however with awareness of their specific roles of clinical practice. At a system level, clinicins contribute to the development and delivery of continuously improving health care and engage with others in working toward this goal. Physicians integrate their personal lives with their clinical, administrative, scholarly, and teaching responsibilities. They function as individual care providers, as members of teams, and as participants and leaders in the health care system locally, regionally, nationally, and globally.

Quotation adapted from www.royalcollege.ca/portal/page/portal/rc/canmeds/framework (permission: pending)

5) Role as a Health Advocate

As Health Advocates, physio-/manualtherapists contribute their expertise and influence, within their scope of practice, as they work with communities or patient populations to improve health. They work with those they serve to determine and understand needs, speak on behalf of others when required, and support the mobilization of resources to effect change.
Improving health is not limited to mitigating illness or trauma or movement disorders, but also involves prevention, health promotion, and health protection with the special emphasis on movement related functions. Improving health also includes promoting health equity, whereby individuals and populations reach their full health potential without being disadvantaged by, for example, race, ethnicity, religion, gender, sexual orientation, age, social class, economic status, or level of education.

Quotation adapted from www.royalcollege.ca/portal/page/portal/rc/canmeds/framework (permission: pending)

6) Role as a Scholar

As Scholars, physio-/manual therapists demonstrate a lifelong commitment to excellence in practice through continuous learning and by teaching others, evaluating evidence, and contributing to scholarship.
They acquire scholarly abilities to enhance practice and advance health care. Physicians pursue excellence by continually evaluating the processes and outcomes of their daily work, sharing and comparing their work with that of others, and actively seeking feedback in the interest of quality and patient safety. Using multiple ways of learning, they strive to meet the needs of individual patients and their families / significant others and of the health care system.
Theystrive to master their domains of expertise and to share their knowledge. As lifelong learners, they implement a planned approach to learning in order to improve in each CanMEDS Role. They recognize the need to continually learn and to model the practice of lifelong learning for others. As teachers they facilitate, individually and through teams, the education of students and physio-/manualtherapists in training, colleagues, co-workers, the public, and others. They are able to identify pertinent evidence, evaluate it using specific criteria, and apply it in their practice and scholarly activities. Through their engagement in evidence-informed and shared decision-making, they recognize uncertainty in practice and formulate questions to address knowledge gaps. Using skills in navigating information resources, they identify evidence syntheses that are relevant to these questions and arrive at clinical decisions that are informed by evidence while taking patient values and preferences into account.
Finally, physicians' scholarly abilities allow them to contribute to the application, dissemination, translation, and creation of knowledge and practices applicable to health and health care

Quotation adapted from www.royalcollege.ca/portal/page/portal/rc/canmeds/framework (permission: pending)

7) Role as a Professional

As Professionals, physicians are committed to the health and well-being of individual patients and society through ethical practice, high personal standards of behaviour, accountability to the profession and society, physician-led regulation, and maintenance of personal health.

Physicians serve an essential societal role as professionals dedicated to the health and care of others. Their work requires mastery of the art, science, and practice of physio-/manual therapy. A physiotherapist's professional identity, as a speicialist in the analysis, treatment and prevention of movement related disorders is central to this Role. The Professional Role reflects contemporary society's expectations of physio-/manual therapists, which include clinical competence, a commitment to ongoing professional development, promotion of the public good, adherence to ethical standards, and values such as integrity, honesty, altruism, humility, respect for diversity, and transparency with respect to potential conflicts of interest. It is also recognized that, to provide optimal patient care, physio-/manualtherapists must take responsibility for their own health and well-being and that of their colleagues. Professionalism is the basis of the implicit contract between society and the profession, with the understanding that physio-/manualtherapists are accountable to those served, to society, to their profession, and to themselves.

Quotation adapted from www.royalcollege.ca/portal/page/portal/rc/canmeds/framework (permission: pending)

The educational program as outlined in this document adheres to these roles in the modules as outllined and gives summative and formative) feedback to the required qualities as outlined in table 4.

Table 8.1: brief overview of CanMed roles and their relationship tot he Modules and Assessment procedures of this educational program

CanMed Roles	Modules	Summative Assessment
Expert Clinician	• IMTA Level 1 • IMTA Level 2 • IMTA Level 2B • IMTA Level 3 • Research in Practice • Mentored Clinical Practice	• Patient records (study years 1,2) • Skills evaluation (study years 1, 2, 3) • Theory examination (study years 1, 2) • Mentored Clinical Practice, all periods • Critically Appraised Paper (study year 2,3) • Clinical Case Report (Study year 3)
Communicator	• IMTA Level 1 • IMTA Level 2 • IMTA Level 2B • IMTA Level 3 • Research in Practice • Mentored Clinical Practice	• Patient records (study years 1,2) • Mentored Clinical Practice, all periods • Clinical Case Report (Study year 3)
Collaborator	• IMTA Level 1 • IMTA Level 2 • IMTA Level 2B • IMTA Level 3 • Research in Practice • Mentored Clinical Practice	• Patient records (study years 1,2) • Mentored Clinical Practice, all periods • Clinical Case Report (Study year 3)
Leader	• IMTA Level 1 • IMTA Level 2 • IMTA Level 2B • IMTA Level 3 • Research in Practice • Mentored Clinical Practice	• Mentored Clinical Practice, all periods • Clinical Case Report (Study year 3)
Health Advocate	• IMTA Level 1 • IMTA Level 2 • IMTA Level 2B • IMTA Level 3 • Research in Practice • Mentored Clinical Practice	• Patient records (study years 1,2) • Skills evaluation (study years 1, 2, 3) • Theory examination (study years 1, 2) • Mentored Clinical Practice, all periods • Clinical Case Report (Study year 3)
Scholar	• IMTA Level 1 • IMTA Level 2B • IMTA Level 3 • Research in Practice • (Mentored Clinical Practice)	• Critically Appraised Papers (CAPs) in Study Years 2, 3 • Clinical Case Report – written and verbal presentation • Patient assessment and treatment sessions in study years 2 and 3 • Learning report at the completion of the education program
Professional	• IMTA Level 1 • IMTA Level 2 • IMTA Level 2B • IMTA Level 3 • Research in Practice • Mentored Clinical Practice	In all assessments of the educational program

9 IFOMPT Standards – comparison

(This chapter is transcribed from Banks & Hengeveld (2014) The Maitland Concept as a Clinical Practice Framework for neuromusculoskeletal disorder. Chapter 1 in Hengeveld E. Banks K (eds) (2014) Maitland's Peripheral Manipulation – Management of Neuromusculoskeletal Disorders, Vol 2. 5th Ed. Elsevier-Churchill Livingstone, Edinburgh.

The International Federation of Orthopaedic Manipulative Physical Therapy (IFOMPT) has defined standards for the educational programs at OMT Level (Orthopaedic Manual Therapy) for their member countries[4] (IFOMPT Standards Document, 2008)*. The purpose of the document is to support each national representative group with their curriculum development and delivery.
The standards document gives a detailed insight into dimensions and competencies required by manipulative physiotherapists to practice at an agreed international standard.
The Educational Standards Committee also presents a clinical practice framework, which assures and enables the control of quality delivery of health care within the neuromusculoskeletal speciality and movement therapy health care domains.

The definition of OMT (Orthopaedic Manipulative Therapy) as voted by the IFOMPT (International Federation of Orthopaedic Manipulative Physiotherapists) general meeting in Cape Town, South Africa in March 2004 is:

> Orthopaedic Manual Therapy is a specialised area of physiotherapy/Physical Therapy for the management of Neuromusculoskeletal (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 bio-psychosocial framework of each individual patient.
> (Beeton et al, 2008)

The IFOMPT-Educational Standards Committee identifies 10 dimensions each with three qualifying competencies (knowledge, skills and attributes). Each dimension is relevant to the definitions of and the paradigm within which OMT is practiced. Each dimension is qualified in terms of the three competencies which demonstrate the major functions for performance in clinical practice in each one (Table 5).
Competencies are defined as:

> Knowledge: the theoretical and professional understanding, use of evidence, principles, procedures.
> Skills: the cognitive, psychomotor and social skills needed to carry out predetermined actions.
> Attributes: the personal qualities, characteristics and behaviour, in relation to the environment.

.Table 9.1: IFOMPT 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 a critical and 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

[4] IFOMPT: Internationation Federation of Orthopaedic Manual Physical Therapy, an official subgroup of WCPT (World Confederation of Physical Therapy. IFOMPT has developed standards for educational programmes in manipulative physiotherapy (MSK Physiotherapy). In order to become a representing country in IFOMPT, memberorganisations need to have set up a postgraduate educational programme in OMT / Musculoskeletal Physiotherapy.

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

The standards document also emphasizes the importance of effective clinical reasoning in underpinning high quality clinical practice. Banks & Hengeveld (2010, 2015) present a clinical practice framework for practice from which a competencies-based profession has evolved and enable manipulative physiotherapists to *think, plan, execute to prove.*
There should be evidence, in practice, of the criteria as listed in table 6, which gives an overview of learning outcomes of this educational programme related to clinical practice, research-in-practice and life long learning/reflective practice

Table 9.2: Assessment of clinical practice matched to IFOMPT dimensions 1-10.

Subjective Examination	• **Demonstrate a patient-centred approach to clinical practice (dimension 6)**
	  • The patient is consistently given choices
	  • The patient is consistently included in decision making
	  • Informed consent is clearly sought throughout
	  • The therapist recognizes the body's capacity to inform and drive decision making
	  • The clinical reasoning process is patient-driven and decisions made are clearly based on evidence from the patient
	  • There is a focus on 'you' as the patient
	• **Demonstrate a collaborative approach to interviewing (dimensions 6 and 7)**
	  • Use of open, unambiguous questions
	  • Questions focus on the patient experience of their complaint
	  • The therapist listens to the patient (i.e. no interrupting, not bombarding them with questions)
	  • Directed questions are the exception rather than the rule
	  • The patient is given an opportunity to tell their story
	• **Demonstrate an attention to detail in information gathering (dimensions 6 and 7)**
	  • Detailed analysis of patient's main problems, body chart (symptom areas and nature), behaviour of symptoms (including analysis of movement tolerance and acceptance), present and past history of symptoms, relevant medical and health questions and risk factors
	• **Demonstrate thoughtful and effective communication strategies (dimension 7)**
	  • Attention to nonverbal issues such as patient/therapist positions during interview, barriers to communication
	  • Attention to developing an effective therapeutic relationship (patient at ease, included)
	  • Questions asked with clarity and one at a time
	  • Clear meaning to the question
	  • Attention to seeking reliable answers
	  • Questions unbiased
	  • Therapist recognizes the importance of key words and phrases
	  • Need for immediate response questions and feedback loops identified ('so are you saying that …?')
	• **Demonstrate advanced skills in clinical reasoning (hypothetico-deductive, pattern recognition) (dimension 6)**
	  • Multiple hypotheses considered and analyzed (deductive reasoning)
	  • Clear use of knowledge to support analysis of clinical evidence
	  • Ability to recognize clear patterns of clinical presentation (inductive reasoning)
	  • Clear explanation to the patient of findings from interview, examination and treatment, what they mean and what should be expected (diagnostic, narrative, procedural and prognostic reasoning)
	• **Demonstrate an expert awareness of differential medical diagnosis and risk/benefit analysis (dimension 2)**
	  • Identify patient's current medical and health status
	  • Understanding of medication
	  • Understanding results of medical screening
	  • Awareness of differential diagnosis (mimicking symptoms)
	  • Awareness off red flag/yellow flag issues
	• **Demonstrate expertise in linking the patient experience to physical examination assessment (dimension 6)**
	  • Attention to planning physical examination (including agreement and consent on state of undress)
	  • Knowing what tests to carry out and to what degree (to P1 or L)
	  • Identify potential and relevant contributing factors
	  • Any special testing needed
	  • Possible interventions

Physical Examination	• **Demonstrate expertise in observation (dimension 8)**
	  • Time allocated to general and specific observation
	  • Recognition of relevant faults
	  • Recognizing what is ideal and what isn't
	  • Effects of correcting faults on symptoms
	• **Demonstrate expertise in analysis of functionally demonstrated movements (dimension 8)**
	  • Linking functional demonstration directly to complaints
	  • Identify clear parameters of movement impairment (limitations and restrictions)
	  • Detailed analysis of the functional movement
	• **Demonstrate expertise in structural differentiation (dimension 8)**
	  • Direct link to analysis of functional demonstration
	  • Detail of knowledge of structure and function applied to differentiation
	  • Skill in loading and unloading individual movement system structures (arthrogenic, myogenic, neurogenic)
	  • Reproducibility and reliability of response and handling
	• **Demonstrate a broad and deep range of multidimensional clinical handling skills applied appropriately (dimension 8)**
	  • Detail and range of clinical measures adopted (active movement, overpressure, palpation, combined movements, motor control strategies, neurodynamic testing, muscle length strength, joint motion (accessory/physiological, functional corners) specific diagnostic tests, special tests
	• **Demonstrate an ability to clearly link examination findings to interventions (dimension 6)**
	  • Understanding of how to merge examination with interventions
	  • Relate interventions to subjective and objective data
	• **Demonstrate an ability to use research evidence and knowledge to support clinical decision making (dimension 1)**
	  • Relate clinical presentation, clinical measures and interventions to relevant evidence in the literature or knowledge of structure, function and pathobiology
	  • Depth and breadth of research portfolio

Treatment	• **Demonstrate accuracy and sensitivity in the application of a broad and deep range of clinical intervention skills (dimension 8)**
	Attention to detail of:
	  • Joint mobilization techniques
	  • Neurodynamic techniques
	  • Motor control strategies
	  • Cognitive behavioural/education strategies
	  • Exercise design and application
	  • Electrotherapy and kindred modalities
	  • Self-management
	  • Rehabilitation
	  • Movement capacity and performance, healthy life style

Reassessment, documentation and analysis, including Evidence-based-Practice / Research-in-Practice (Evidence-informed Practice)	• **Demonstrate an ability to link interventions to appropriate multidimensional outcome measures (dimension 6)**
	  • Establish clear patient-centred outcomes
	Outcomes related to:
	  • Impairment
	  • Activity limitation
	  • Participation restriction
	  • Understanding the context of environmental and personal mediators
	• **Demonstrate an expert ability to use reassessment as an effective clinical reasoning tool (dimension 6)**
	Details of reassessment:
	  • During treatment
	  • After each intervention
	  • Before each treatment session
	• **Demonstrate an ability to document assessment, examination and treatment in line with HPC and CSP standards (and other national and international standards)**
	Documentation meets professional and medico-legal standards. Documentation is:
	  • Accurate
	  • Comprehensive
	  • Logical
	  • Methodical
	  • Meaningful
	• **Demonstrate an ability to reflect upon clinical skills and theoretical knowledge and the appropriate use of supporting evidence from research and the biomedical, clinical, behavioural sciences. (dimensions 2, 3, 4, 5, 9 and 10)**
	  • Attribute of reflective practice

	• Identify skills and knowledge used • Identify and propose action for skills and knowledge gaps • **Demonstrate an ability to analyze clinical skills and theoretical knowledge and the appropriate use of supporting evidence from research and the biomedical, clinical, behavioural sciences (dimensions 2, 3, 4, 5, 9 and 10)** • Attribute of analytical practice • Ability to analyze practice and knowledge in relation to the individual patient • Ability to analyze clinical evidence in relation to knowledge and research and vice versa • **Demonstrate an ability to critically appraise clinical skills and theoretical knowledge and the appropriate use of supporting evidence from research and the biomedical, clinical, behavioural sciences (dimensions 2, 3, 4, 5, 9 and 10)** • Attribute of critical appraisal of knowledge and practice • Identify reliable and unreliable evidence
Clinical expertise, continued professional commitment – Life-long learning	• **Demonstrate an ability to critically reflect and analyse the own clinical practice by showing a level of expertise*** • Attribute of „reflection-in-action" when working with clinical presentations for which the therapist has had previous experience**, with a fluid and flexible performance and a deep understanding of the total situation and capacity to zero in on the accurate region of the problem* • Attribute of highly skilled analyitical ability and skills of structured „reflection-on-action" when working with complex situations or for which the therapist has had no previous experience* / ** • **Demonstrate professional commitment to "life-long-learning" as an ongoing, voluntary and self-motivated pursuit of knowledge with regards to OMT-practice** • Attribute of recognising learning steps at critical moments in the educational programme as well as the recognition of learning needs in critical moments of the programme as well as in clinical situations • Attribute of adequately acting upon learning needs by taking adequate steps as for example peer learning, intervisions, supervisions, database searches and critical appraisal of relevant scientific literature and other means in which learning can be enhanced *Benner P. 1984. From Novice to Expert. Excellence and Power in Clinical Nursing Practice. Addison-Wesley, pp. 13-34; **Schön DA (1983). The Reflective Practitioner. How professionals think in action. Arena, Aldershurt

(Based on IFOMPT Educational standards, part A, Competencies in OMT 1 (Beeton et al. 2008).

10 Appendix 1: Literaturelists

During each study year learners are required to deepen their learning process with professional literature. This includes compulsory literature to deepen learning and to prepare for modules, as well as recommended literature as further background reading. Most recommended reading is included in the module description (chapter 6) of this document, in the individual study logbook/-portfolio, as well as directly suggested by the teachers.

The following list (table 10.1) is extensive. The primary purpose is to provide interested learners the opportunity to study subjects in depth with reference to this literaturelist, as well as to search strategies in online databases and libraries. Furthermore it is recommended that learners consults www.imta.ch for additional references which are used as a basis for the IMTA Modules.

Table 10.1: Literaturelist organised in themes: (overlap between themes may be possible)

Physiotherapy and Manual Therapy – paradigms, professional definitions, description; ICF

Professional Descriptions and Definitions (declarative knowledge)

American Physical Therapy Association (APTA): *Guide to Physical Therapist Practice ('The Guide')*, 1998, American Physical Therapy Association.
American Physical Therapy Association 2009 Autonomous physical therapist practice: definitions and privileges. APTA BOD P03-03-12-28, 2006
Barclay J 1994 In Good Hands: the History of the Chartered Society of Physiotherapy 1894–1994. Butterworth Heinemann, Oxford
Bazin S, Robinson P (eds) 2002 Chartered Society of Physiotherapy Rules of Professional Conduct, 2nd edn. CSP, London
Chartered Society of Physiotherapy [2008].Scope of Practice, CSP, Jan 2008, 1-17
Chesworth B, MacDermid J, Roth J et al. 1998 Movement diagrams and 'end-feel' reliability when measuring passive lateral rotation of the shoulder in patients with shoulder pathology. Physical Therapy. vol 78;(6), June 1998:593–601
Cott, C. A., Finch, E., Gasner, D. et al. 1995. The movement continuum theory for physiotherapy. Physiotherapy Canada, 47, 87–95
Hengeveld E 1998, 1999 Gedanken zum Indikationsbereich der Manuallen Therapie. Teil 1, Teil 2. Manuelle Therapie 2, 3:176–81, 2–7
Hislop H.J. (1975), The Not-So-Impossible Dream, *Physical Therapy*, **69**, 548 - 553
KNGF (1992) Visie op Fysiotherapie. Amersfoort: Koninklijk Nederlands Genootschap voor Fysiotherapie [
KNGF (1998) Beroepsprofiel Fysiotherapie. Amersfoort, Koninklijk Nederlands Genootschap voor Fysiotherapie
Sahrmann SA: Diagnosis by the physical therapist- a prerequisite for treatment, *Phys Ther* 68(11): 1703–1706, 1988
WCPT (1999) Description of Physical Therapy. London: World Confederation of Physical Therapy
WCPT (2007) (Position statement. Description of physical therapy, 2007. http://www.wcpt.org/ sites/wcpt.org/files/files/WCPT_ Description_of_Physical_Therapy- Sep07-Rev_2.pdf (accessed 31 March 2013). World Confederation for Physical Therapy):

Paradigms

Bensing J (2000) Bridging the gap.The separate worlds of evidence-based medicine and patient-centered medicine. Patient Education and Counseling 39:17–25
Coaz W. (1993) Paradigmenwechsel - auch in der Physiotherapie?Physiotherapie-Bulletin, 33, 1-12
Cook C: The lost art of the clinical examination: an overemphasis on clinical special tests, *J Man Manip Ther* 18(1):3–4, 2010.
Elvey RL, O'Sullivan PB. A contemporary approach to manual therapy. In: Boyling JD, Jull GA. Grieve's Modern Manual Therapy – The Vertebral Column. Elsevier Churchill Livingstone, Edinburgh; 2004. p. 471-93Hancock MJ, Maher CG, Laslett M, Hay E, Koes B (2011) Discussionpaper: what happened to the 'bio' in the bio-psycho-social model of low back pain? Eur Spine J,20:2105–10.
Hengeveld E (2001) Psychosocial Issues in Physiotherapy in Switzerland: Manual Therapists' Perspectives and Observations. MSc-Thesis, University of East Lndon, GB
O'Sullivan P. (2011) It's time for change with the management of non-specific chronic low back pain. Editorial. Br. J. Sports Med, page 4-6, doi:10.1136/bjsm.2010.081638
Waddell G (1987) A New Clinical Model For The Treatment Of Low Back Pain. Spine, 12, 632 - 644

International Classification of Functioning, Disabilities and Health

Altman R.D., Matthew Briggs, Constance Chu, Anthony Delitto, Amanda Ferland, Helene Fearon, G. Kelley Fitzgerald, Joy MacDermid, James W. Matheson, Philip McClure, Paul Shekelle, A. Russell Smith, Jr., Leslie Torburn (2010) - Knee Pain and Mobility Impairments: Meniscal and Articular Cartilage Lesions. Clinical Practice Guidelines Linked to theInternational Classification of Functioning, Disability, and Health from the Orthopaedic Section of the American Physical Therapy Association. JOSPT, 40(6):A1-A35. doi:10.2519/jospt.2010.0304
Childs JD, Cleland JA, Elliott JM, et al: Neck pain: clinical practice guidelines linked to the international classification of functioning, disability and health from the orthopaedic section of the American Physical Therapy Association,
Cibulka MT, White DM, Woehrle J, et al: Hip pain and mobility deficits: hip osteoarthritis. Clinical practice guidelines linked to the international classification of functioning, disability and health from the orthopaedic section of the American Physical Therapy Association, *J Orthop Sports Phys Ther* 39(4): A1–A25, 2009
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11 Appendix 2: Evaluationforms

- All evaluation forms include the criteria, which will be used for the feedback and evaluation of summative assessments.
- It is recommended, that learners work with the evaluation forms to familiarise themselves with the criteria.
- This may be possible by the organisation of practice exams within peer group activities and intervisions.

1) Patient records 1-4 – evaluation forms *(additional info on Nexus Study Platform)*
2) Skills examinations – evaluation form (l*ists of techniques: on Nexus Study Platform)*
3) Final Patient sessions (information & evaluation form)
4) Critically Appraised Papers – evaluation form *(additional info in reader research)*
5) Clinical Case Report – written document (evaluation forms incl. information)
6) Clinical Case Report – verbal presentation (evaluation forms incl. information)
7) Learning Report – evaluation form *(additional information in Study Logbook & Portfolio)*

(Note: evaluation forms Mentored Clinical Practice can be found in the according document)

MAITLAND CONCEPT – Level 1 / 2. week – Evaluatieformulier subjektief onderzoek

Naam cursist: ……

	Voldann	Niet aanwezig	Punten	OPmerkingen
Persoonsgegevens Naam (1) Geboortedatum / -jaar (1) Beroep (en: werkt patient nu – indien niet: waarom) (1) Hobbies / Sport (1)				4
Hoofdprobleem o Indien symptomen: waar (1) o Alg. ADL-beperking (1)				2
Lichaamskaart o Symptoomgebieden (1) o Aangeven van de symptoomvrije gebieden (2) o Kwalificering van de symptoomgebieden ▪ Kwaliteit van de symptomen (1) ▪ Konstant / Intermitterend (1) ▪ Diep/oppervlakkig (1) o Relatie tussen de symptoomgebieden (2) o Kontrolevragen CZS (2)				10
24h-Gedrag o 5-6 Asterisks per onafhankelijk symptoomgebied (INDIEN mogelijk) (2) o Elke asterisk op severity/irritability gekwalificeerd (Aktiviteit mogelijk? Duur & vermindering van het symptoom: hoe, hoe lang) (2) o Verloop van de symptomen tijdens 24u (7 dagen) (2) o Aktiviteitenniveau tijdens de dag /tijdens de week (2)				8
Geschiedenis **Aktuele geschiedenis** - **Sinds wanneer** (1) - **Over symptoombegin (2)** o *Traumatisch – spontaan* o *Relatie belastingen (Use): Belastbaarheid* o *Waar voelde paient. 1. symptomen* o *Wanneer voelde patient 1. symptomen (bijv. ‚s ochtends)* - **Verloop** o *Stabiliteit / Stadium (2)* o *Therapie (arts / FT / andere) – welke & welke resultaten (2)* - **Nu : Begin(1)** **Vroegere Geschiedenis (3)** Welke episodes? Hoe werden de episodes opgewekt? Hoe werden de episodes weer beter? Hoe was het tussen de episodes? (100% pijnvrij / 0% Beperkingen)? Verloop van de klachten in loop van de tijd? Elke episode hetzelfde? Ho eis huidige episode : vreogere episode(s)?				8 3
Speciale vragen (3) Alg. gezondheid Gewicht Medicijnen Anderzoek zoals lab., röntgen Ziektes Operaties Ongevallen Andere				3
Notering - Systematische. georganiseerde notering (2) - Gemakkelijk terug te lezen, goed te lezen (2) - Telegramstijl (1) - 24h Parameter allen met een * gemarkeerd (1)				6
Puntentotaal				

Maximaal: 44 Punten; deze test is voldoende bij een minimaal puntentotaal van 30

Resultaat: ……punten; Voldoende: p ja p neen*

Naam cursist: .....

	Voldan n	Niet aanwe zig	Punten	OPmerkingen
Persoonsgegevens Naam (1) Geboortedatum / -jaar (1) Beroep (en: werkt patient nu – indien niet: waarom) (1) Hobbies / Sport (1)				4
Hoofdprobleem o Indien symptomen: waar (1) o Alg. ADL-beperking (1)				2
Lichaamskaart o Symptoomgebieden (1) o Aangeven van de symptoomvrije gebieden (2) o Kwalificering van de symptoomgebieden ▪ Kwaliteit van de symptomen (1) ▪ Konstant / Intermitterend (1) ▪ Diep/oppervlakkig (1) o Relatie tussen de symptoomgebieden (2) o Kontrolevragen CZS (2)				10
24h-Gedrag o 5-6 Asterisks per onafhankelijk symptoomgebied (INDIEN mogelijk) (2) o Elke asterisk op severity/irritability gekwalificeerd (Aktiviteit mogelijk? Duur & vermindering van het symptoom: hoe, hoe lang) (2) o Verloop van de symptomen tijdens 24u (7 dagen) (2) o Aktiviteitenniveau tijdens de dag /tijdens de week (2)				8
Geschiedenis **Aktuele geschiedenis** - **Sinds wanneer** (1) - **Details over symptoombegin** o *Traumatisch – spontaan (1)* o *Relatie belastingen (Use): belastbaarheid (2)* o *Waar voelde patient 1. symptomen (1)* o *Wanneer voelde patient de 1. symptomen (bijv. ,s morgens) (1)* - **Verloop** o *Stabiliteit /sStadium (2)* o *Therapie (medisch /FPT / andere) – welke & welke resultatent (2)* - **Nu : begin (1)** **Vroegere geschiedenis** Welke episodes? (1) Hoe werden de episodes opgewekt? (1) Hoe zijn de episodes beter geworden? (1) Hoe ging het tussen de episodes (100% pijnvriji / 0% beperkingen)? (1) Ontwikkeling van symptomen/beperkingen in loop der tijdt? (1) Elke episode hetzelfde? (1) Hoe is huiige epispde : vorige episode(s)? (1)				11 7
Speciale vragen (3) Alg. gezondheid Gewicht Medicijnen Anderzoek zoals lab., röntgen Ziektes Operaties Ongevallen Andere				3

- Hypotheses o Bronnen kompleet (3) o Bijdragende faktoren (3) o Pathobiologische processen ▪ Weefselpathologie (1) ▪ Genezingsstadium (1) ▪ Neurofysiologische symptoommechanismes (1) o Gevarensituaties & KI ▪ Severity / Irritierbarkeit gemotiveerd (2) ▪ Nature faktoren gemotiveerd (2) - Dosering o Welke symptomen reproduceren / welke evt niet reproduceren (1) o Testen tot P1 / iets verder dan P1 / tot L mogelijk (1) o Hoeveelheid testen: weinig / Standaard zonder OP / Standaard met OP / 'if necessa tests' (1) - Konkrete afloop P/E, incl. planning van reassessments (3) - Evt. Rx plan (1)				
Funktieonderzoek (totaal 10 punten) - Inspektie - Aktieve testen - Neurologisch onderzoek (Reflexen, kennmm, sensibiliteit) - Neurodynamische testen - Passieve testen (Accessory movements / fhysiologische bewegingen) - Reassessments adequaat, kompleet (= subj. uitspraken & consequente **) - Waarschuwing, observeren (Vgl!), aanbevelingen / instrukties a.h. eind van de zitting genoteerd				10
Planning v.d. 2. zitting - Subjektief onderzoek – reassessment v.d. ** kompleet beschreven (1) - Aanvullende vragen in de anamnese gepland (1) - Reassessment v.d. P/E ** duidelijk genoteerd (2) - Aanvullende testen, zoals bijv. Neurologisch onderzoek (1) - Screening van anderen bewegingscomponenten (1) - Forward Reasoning: wat doen ‚indien beter' / ‚isq'. / evt. ‚slechter'(met bijv. flowchart of decision tree) (2) - Overwegingen mbt. Rx met passieve bewegingen (gebaseerd op P/E resultaten) (2) - Overwegingen mbt. evt self-managements (doelen en mogelijke interventies) (1) - Uitspraken over onderzoek/screening/behandeling in de 3. zitting (1)				12
Notering - Systematische. georganiseerde notering (2) - Gemakkelijk terug te lezen, goed te lezen (2) - Telegramstijl (1) - 24h Parameter alle met een * gemarkeerd (1) - p/e Parameter alle met een * gemarkeerd (1) - Aktieve testen kompleet **(d.h. kwantiteit, kwaliteit, symptoom)** en systematisch genoteerd (✓,✓ methode) (3) - Passieve testen: beschrijving van gedrag van P. R, evt S (evt. met bewegingsdiagram (2) - Reassessments systematisch (naast Interventies) en compleet (= subj. Uitspraak pat.; consequente P/E**) genoteerd; incl. vergelijkingen (3)				15
Puntentotaal				

Maximaal: 102 Punten; deze test is voldoende bij een minimaal puntentotaal van 68

Resultaat: ……punten; **Voldoende: ☐ja ☐ neen***

Handtekening (Docent): ……

***Indien onvoldoende: herhaling van deze toets uiterlijk tot aan het begin van cursusweek 4**

BRENG AUB MEE: EEN PATIENTEN-VERSLAG VOOR EEN GROEPS-AKTIVITEIT OP DAG$_1$ VAN DE 4. CURSUSWEEK

- **Subjektief onderzoek (anamnese)**
- **Planning van funktieonderzoek P/E**
- **Funktieonderzoek**
- **Planning van de 2. zitting**
- **2. zitting**
- **Planning van de 3. zitting**

van een door U behandelde patient

SUBJEKTIEF ONDERZOEK

- Persoonsgegevens
  - Naam (1)
  - Geboortedatum/-jaar (1)
  - Beroep (en of patient nu werkt – indien niet: waarom niet) (1)
  - Hobbies / Sport (1)
- Hoofdprobleem
  - Indien symptomen: waar (1)
  - Alg. ADL-beperking (1)
- Lichaamskaart
  - Symptoomgebieden (1)
  - Aangeven van de symptoomvrije gebieden (2)
  - Kwalificering van de symptoomgebieden
    - Kwaliteit van de symptomen (1)
    - Konstant / Intermitterend (1)
    - Diep/oppervlakkig (1)
  - Relatie tussen de symptoomgebieden (2)
  - Kontrolevragen CZS (2)
- 24h gedrag
  - 5-6 Asterisks per onafhankelijk symptoomgebied (INDIEN mogelijk) (2)
  - Elke asterisk op severity/irritability gekwalificeerd (Aktiviteit mogelijk? Duur & vermindering van het symptoom: hoe, hoe lang) (2)
  - Verloop van de symptomen tijdens 24u (7 dagen) (2)
  - Aktiviteitenniveau tijdens de dag /tijdens de week (2)
- Geschiedenise (Hx)
  - Aktuele geschiedenis
    - Sinds wanneer (1)
    - Details over het begin van de symptomen
      - Traumatisch – spontaan (1)
      - Relatie tussen bealstingen (Use / Gebruik) : Belastbaarheid (2)
      - Waar voelde de patient de 1e symptomen (1)
      - Wanneer voelde de patient de 1e symptomen (bijv. ‚s ochtends) (1)
    - Verloop
      - Stabiliteit / stadium (2)
      - Therapie (medisch; FT; andere) – welke en resultaten (2)
    - Nu:Begin (1)
  - Vroegere geschiedenis
    - Welke episodes (1)
    - Hoe werden de symptomen opgewekt (1)
    - Hoe zijn de episodes steeds beter geworden (1)
    - Hoe ging het tussen de episodes (100% pijnvrij / 0% Beperkingen?) (1)
    - Verloop van de klachten in loop van de tijd (1)
    - Was elke episode hetzelfde? (1)
    - Hoe is de huidige episode : vorige Episode(s) (1)
- Speciale vragen (3)
  - Alg. gezondheid
  - Gewicht
  - Medicijnen
  - Onderzoek zoals lab., röntgen
  - Ziektes
  - Operaties
  - Ongevallen
  - Andere

PLANNING V.H. FUNKTIEONDERZOEK

- Hypotheses
  - Bronnen kompleet (3)
  - Bijdragende faktoren (3)
  - Pathobiologische processen
    - Weefselpathologie (1)
    - Genezingsstadium (1)
    - Neurofysiologische symptoommechanismes (1)

- Gevarensituaties & KI
  - Severity / Irritierbarkeit gemotiveerd (2)
  - Nature faktoren gemotiveerd (2)

- Dosering
  - Welke symptomen reproduceren / welke evt niet reproduceren (1)
  - Testen tot P1 / iets verder dan P1 / tot L mogelijk (1)
  - Hoeveelheid testen: weinig / Standaard zonder OP / Standaard met OP / 'if necessary tests' (1)
- Konkrete afloop P/E, incl. planning van reassessments (3)
- Evt. Rx plan (1)

FUNKTIEONDERZOEK

(totaal 10 punten)

- Inspektie
- Aktieve testen
- Neurologisch onderzoek (Reflexen, kennmm, sensibiliteit)
- Neurodynamische testen
- Passieve testen (Accessory movements / fhysiologische bewegingen)
- Reassessments adequaat, kompleet (= subj. uitspraken & consequente **)
- Waarschuwing, observeren (Vgl!), aanbevelingen / instrukties a.h. eind van de zitting genoteerd

PLANNING v.d. 2. ZITTING

- Subjektief onderzoek – reassessment v.d. ** kompleet beschreven (1)
- Aanvullende vragen in de anamnese gepland (1)
- Reassessment v.d. P/E ** duidelijk genoteerd (2)
- Aanvullende testen, zoals bijv. Neurologisch onderzoek (1)
- Screening van anderen bewegingscomponenten (1)
- Forward Reasoning: wat doen ‚indien beter' / ‚isq'. / evt. ‚slechter'(met bijv. flowchart of decision tree) (2)
- Overwegingen mbt. Rx met passieve bewegingen (gebaseerd op P/E resultaten) (2)
- Overwegingen mbt. evt self-managements (doelen en mogelijke interventies) (1)
- Uitspraken over onderzoek/screening/behandeling in de 3. zitting (1)

UITVOERING V.D. 2. ZITTING

(totaal 15 punten)

- Subjektief reassessment: spontane uitspraken patient
- Subjektief onderzoek controle / vergelijking van subjekteive **
- Funktieonderzoek; Reassessment van de P/E**
- Aanvullende testen
- Screening van andere komponenten kompleet
- Forward reasoning: overwegingen wat te doen ‚indien beter'/‚isq'/evt ‚slechter'
- Behandelingsopbouw en keuze van technieken, inkl. self-management
- Consequente & komplete reassessments

PLANNING v.d. 3. ZITTING

- Subjektief onderzoek – reassessment v.d. ** kompleet beschreven (1)
- Aanvullende vragen in de anamnese gepland (1)
- Reassessment v.d. P/E ** duidelijk genoteerd (2)
- Aanvullende testen, zoals bijv. Neurologisch onderzoek (1)
- Screening van anderen bewegingscomponenten (1)
- Forward Reasoning: wat doen ‚indien beter' / ‚isq'. / evt. ‚slechter'(met bijv. flowchart of decision tree) (2)
- Overwegingen mbt. Rx met passieve bewegingen (gebaseerd op P/E resultaten) (2)
- Overwegingen mbt. evt self-managements (doelen en mogelijke interventies) (1)
- Uitspraken over onderzoek/screening/behandeling in de 4. zitting (1)

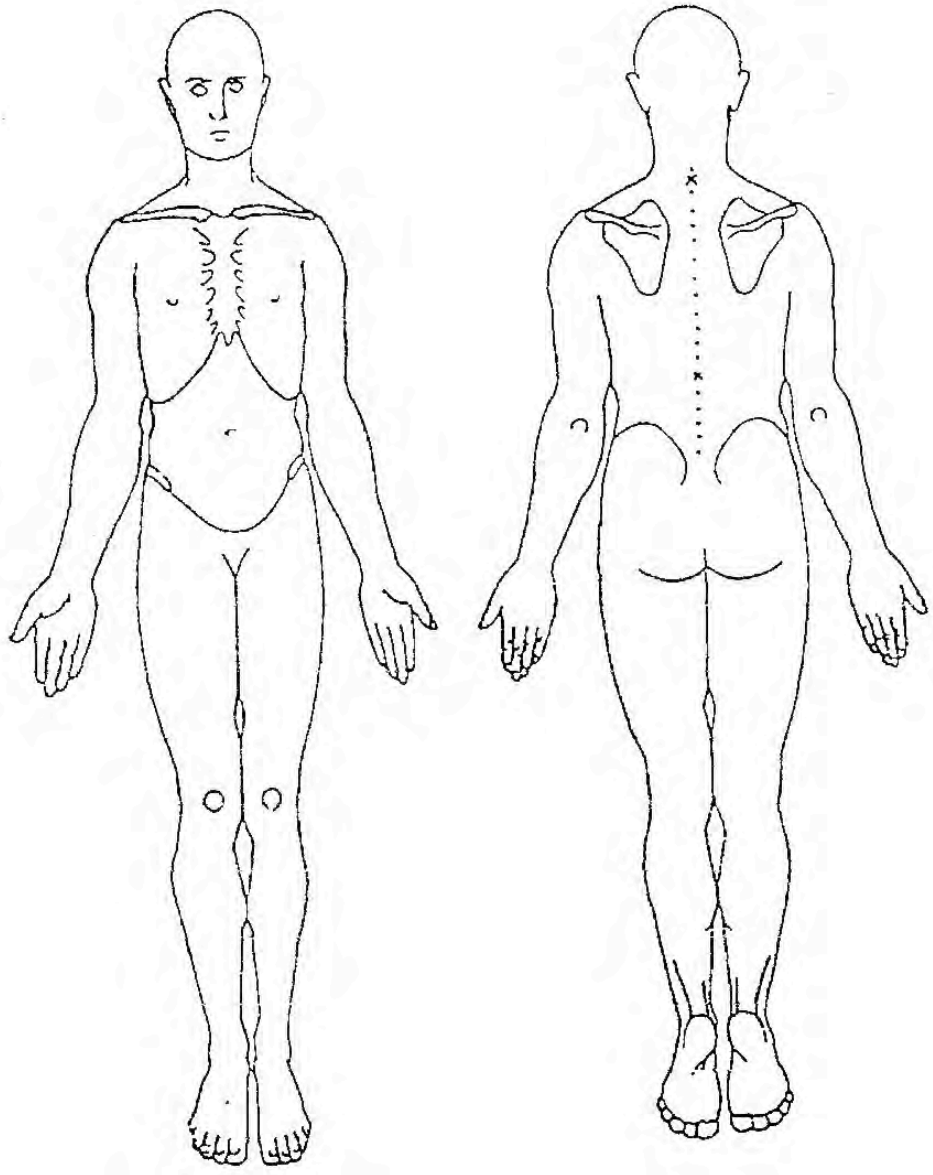
NOTERING

- Systematische. georganiseerde notering (2)
- Gemakkelijk terug te lezen, goed te lezen (2)
- Telegramstijl (1)
- 24h Parameter alle met een * gemarkeerd (1)
- p/e Parameter alle met een * gemarkeerd (1)
- Aktieve testen kompleet **(d.h. kwantiteit, kwaliteit, symptoom)** en systematisch genoteerd (✓,✓ methode) (3)
- Passieve testen: beschrijving van gedrag van P. R, evt S (evt. met bewegingsdiagram (2)
- Reassessments systematisch (naast Interventies) en compleet (= subj. Uitspraak pat.; consequente P/E**) genoteerd; incl. vergelijkingen (3)

Maximaal: 129 punten; deze test is voldoende bij een minimaal puntentotaal van 85

***Indien onvoldoende: herhaling van deze toets uiterlijk tot 6 weken na afloop van cursusweek 4**

Naam:..... Geboortedatum: .....
Beroep: ..... Hobby's/Sport: .....
Diagnose: .....
Fysiotherapeut: .....
Datum van onderzoek: .....
Hoofdprobleem: .....
……..
Doelen van de patiënt: .....



Dgl. opgaven / werk:		**Sociale contacten**		**Hobby's / Sport:**	**Speciale gevarensituaties:**
Geen problemen	1	Geen beperkingen	1	1	.....
Nauwelijks probl.	2	Licht beperkt	2	2	.....
Enige problemen	3	Middelmatig beperkt	3	3	.....
Veel problemen	4	Sterk beperkt	4	4	.....
Niet mogelijk	5	Niet mogelijk	5	5	……...

IMTA Level 2A
Beoordelingsformulier Patientenverslagen

Naam cursist: .....

Gecorrigeerd door: .....

Datum correctie: .....

Thema	Max punten	Positieve punten	Dingen die verbeterd moeten worden	Punten
		Motiveer de puntentoewijzing!		
Persoonsgegevens Naam, Geboortejaar, beroep, hobbies **Hoofdprobleem** Symptomem (waar), ervaren beperkingen (alg) **Body-chart** Symptoomgebieden, symptoomvrijegebieden, symptoomkwalificatie (aard, int. / const, doep /opp), relatie ts. Gebieden, controlevragen CZSt & andere gevarensituaties)	10			
24h-gedrag Voldoende **; ** op severity / iritability duidelijk gekwalificeerd, welke coping strategieen zet pat. In per *, verloop van de sy. tijdens de dag / week, activiteitenniveau tijdens de dag / week. **Hx** • Actuele Hx: sinds wanneer, details over begin (trauma – ongevalmech; spontaan: use – belastbaarheid enz.) verloop, incl. welke Rx en effecten, nu:begin) • Vroegere Hx: welke episodes, hoe steeds ontwikkeld, hoe steeds beter geworden, tussen de episodes 100% P-vrij en geen beperkingen? Verloop van de pijn resp. beperkingen over de loop der tijd? Hoe is huidige episode : tot vorige episodes? **Speciale vragen** AZ, medic., onderzoek (x-ray, MRI, Lab. enz.) ziektes, ongevallen, ziekenhuis, operaties, gewicht. Byz. Screeningvragen per regio, indien nodig, enz.	15			
Planning van 1e functieonderzoek • Hypotheses (bronnen, bijdr. factoren, pathobiologische mech., gevarensituaties / CI, evt. andere) • Evt. anticipatie op onderzoeksresultaten / Dosering P/E • Afloop P/E (draaiboek)	15			
1e functieonderzoek en evt 1e Rx • Omvattend genoeg mbt: Insp., FD, act. testen en overpressure, evt 'if necessary tests', diff. testen, neurologisch onderzoek, evt. musculair onderzoek, neurodynamisch onderzoek, passieve testen • Reassessments: regelmatig, omvattend (C/O – subj. beleven & consequente P/E test keuze) • Systematisch? • Keuze evt. 1e Rx? Logisch, omvattend opgeschreven, incl. reassessment?	15			

IMTA Level 2A
Beoordelingsformulier Patientenverslagen

Planning van zitting 2 – 6 (7) • Hypotheses regelmatig gecheckt of gelijk gebleven/veranderd • Aanvullende vragen in C/O in zittingen 2 en/of 3 • Screening van componenten zinvol en logisch inprocedures • Retrospectief assessment gepland • Duidelijke procedure-planning ('draaiboek') • Forward reasoning: welke beslissingen nemen na bepaalde reassessments (wat doen indien beter / ISQ / slechter) • Per zitting consequent gepland	25			
Uitvoering van zitting 2 – 6 (7) • Logische opbouw per zitting (C/O – spontane info, vergelijken C/O**, check effecten self Rx, aanvullende info, retrospectief assessment) • Logische volgorde P/E (check **, screening, opbouw passieve testen en reassessments • Logische volgorde, Rx en reassessment • Verslag van waarschuwingen en instructies per zitting • Verslag van andere interventies (fys. therapie, massage; educatie / informatie)	25			
Notatie • Systematische. georganiseerde notering • Gemakkelijk terug te lezen, goed te lezen • Telegramstijl • 24h Parameter alle met een * gemarkeerd • p/e Parameter alle met een * gemarkeerd • Aktieve testen kompleet **(d.h. kwantiteit, kwaliteit, symptoom)** en systematisch genoteerd (✓,✓ methode) • Passieve testen: beschrijving van gedrag van P. R, evt S (evt. met bewegingsdiagram • Reassessments systematisch (naast Interventies) en compleet (= subj. Uitspraak pat.; consequente P/E**) genoteerd; incl. vergelijkingen	15			
Alg. indruk over tijdsmanagement (bijv. werd al in de eerste zitting P/E en Rx uitgevoerd of geschiedde dit eerst in latere zittingen? Screening procedures in de eerste paar zittingen / resp. gemoitveerd waarom later / niet gedaan? Self-Rx vroeg genoeg geintegreerd, enz.)	5			
Alg. opm. over onderzoeksprocedures Zie ook uitvoering van zitting 2 – 6 /7) Geef hier een meer algemene uitspraak				
Alg. opmerkingen over Rx Zie ook uitvoering van zitting 2 – 6 /7) Geef hier een meer algemene uitspraak • keuze van passieve behandelingstechnieken: adequaat? Progressie Rx? • Integratie self-Rx, keuze Self-Rx adequaat? Regelmatig nagevraagd in C/O? • Integratie andere interventies (instructie, educatie; fys. therapie/ massage) • Regelmatig reassessment na de versch. interventies				
Wat zou je anders hebben gedaan?				

Aantal punten :..... ☐ voldoende ☐ onvoldoende*.
(Deze toets is voldoende indien tenminste 85 / 125 punten worden bereikt)

Paraaf docent .....

** indien onvoldoende: afgifte van een nieuw verslag of dag$_1$ van cursusweek 2*

Feedback formulier toets vaardigheden P/E, Rx

Datum: .....

Opleidingsjaar:..... / IMTA Level 1 / 2a / 2b / 3

Naam: .....

Techniek	**Uitgangshouding patiënt**	**Uitgangshouding FT**	**Handvatting** *(„localisation of forces“)*	**Toepassing** *(„application of forces“)*	**Aantal punten**
1)					
2)					
3)					
4)					
5)					
6)					
7)					
8)					
				Resultaat: **Voldoende / onvoldoende**	**Puntentotaal:**
				Handtekening Docent:	

Patiënten-toets / MCP III (Stageperiode III)

Algemene informatie Patiënten Toets MCP III

De patiënten toets vindt bij 2 examinatoren plaats, die door de IMTA Teaching Faculty NL hiertoe aangewezen zijn.
Elke examinator vult onafhankelijk van de andere examinator het beoordelingsformulier in en geeft per sectie een cijfer (zie blz 3-4 resp. Blz 5-6).
Bovendien vult 1 examinator tijdens de zittingen en het gesprek een verslagformulier in (zie blz. 8 -10).
Na afsluiting van de tweede zitting van het patiënten examen wordt het gemiddelde puntengetal tussen beide examinatoren berekend – dit bepaalt het eindcijfer.
NB: indien het verschil in punten tussen beide examinatoren meer dan 15% bedraagt, moet de opleidingscoördinator worden geconsulteerd, voor een definitief cijfer wordt gegeven.

Verwachtingen aan de eerste patiënten-zitting: (duur: maximaal 60 minuten; 50 min. Contacttijd met patiënt, 10 min. Reflectie. Evt kan de contacttijd 60 min duren, maar de reflectietijd wordt dan ingekort).

- de kandidaat voert de anamnese uit
- maakt een schriftelijk plan van het functieonderzoek, dit betreffen concrete stappen, incl forward reasoning welke stappen na de betreffende reassesment procedures betreffen
- Uitvoering van functieonderzoek, reassesment en evt proefbehandeling. Uitleg, waarschuwing, evt instructies
- De kandidaat kan een paar minuten gebruiken om de notities aan te vullen

Examinatoren gesprek: (duur: 30 minuten(

- de kandidaat vat zijn bevindingen en hypotheses samen
- Vragen van de examinatoren over het klinisch redeneringsproces over de beslissingen die de kandidaat heeft genomen tijdens de eerste sessie en wat de kandidaat denkt in de tweede en derde sessie te vragen / doen (screening, Rx enz.)
- Vragen over toegepaste theoretische kennis tijdens de zitting en de interpretatie van de onderzoeks- en behandelingsgegevens

Verwachtingen aan de tweede patiënten-zitting (vervolgzitting): (duur: maximaal 40 minuten)

- De kandidaat levert een volledig patiëntenverslag af, incl. IMTA-Plannings- en reflectieformulier
- De kandidaat geeft een schriftelijk plan af over de stappen die hij tijdens anamnese, functieonderzoek en Rx denkt te nemen (in een logische tijdvolgorde)
- Bovendien zijn in dit plan ook mogelijke stappen voor een derde zitting opgenomen
- Kandidaat voert de tweede zitting uit, incl samenvatting, uitleg en aanbevelingen aan de patiënt. Evt. self-management strategieën zijn gemeenschappelijk met de patiënt uitgewerkt

Examinatorengesprek na de tweede zitting (duur: 20 minuten)

- Zie boven
- De kandidaat is in staat om een goede samenvatting van de eerste twee zittingen te geven en heeft duidelijk hypotheses opgesteld over de klinische presentatie met evt klinische patronen en het te volgen beleid (evt. aanvullende screening testen, management)

Nadien vullen beide examinatoren in afwezigheid van de kandidaat de benodigde formulieren in, ondertekenen deze en bespreken deze met de kandidaat. Ook de kandidaat tekent voor het resultaat (formulier op blz. 2)
Alle documenten (incl. patiënten verslag van de kandidaat en aantekeningen resp.aparte beoordelingsformuieren) worden binnen 3 dagen naar de opleiding gestuurd:

Hogeschool Utrecht, Centrum voor Bewegingsstudie
Opl. Manuele Therapie Maitland Concept
Tnv Lemziye Ozbozkurt / Elly Hengeveld
Bolognalaan 101
3584 CJ Utrecht

Uittreksel examenreglement

De patiëntentoets wordt als “uitstekend” beoordeeld (80. – 100 punten), indien de student de eindcompetenties[1)] zoals genoemd in de stagerichtlijnen volledig vervult[1]

De patiëntentoets wordt als “goed” (70 – 79.9 punten) beoordeeld, indien de competenties van de student minimaal afwijken van de genoemde eindcompetenties

De patiëntentoets wordt als “voldoende” (60– 69.9 punten) beoordeeld, indien de student niet geheel voldoet aan de genoemde eindcompetenties, maar in staat is adequaat onderzoek en behandeling uit te voeren.

De patiëntentoets wordt als “onvoldoende” (0 – 59.9 punten) beoordeeld, indien de student niet aan de eisen voldoet, vooral als de onderdelen anamnese, planning functieonderzoek, functieonderzoek en gespreks-/onderzoeks- en behandelingstechnieken als onvoldoende worden beoordeeld.

Indien de patiëntentoets als onvoldoende wordt beoordeeld, vindt een herexamen plaats. Examinatoren zijn een docent van de opleiding en een verdere examinator.

Kandidaat brengt zelf mee naar het examen: IMTA-plannings- & reflectieformulier, reflexhamer, centimeter en andere relevante onderzoeksmiddelen.

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[1] **Eindcompetenties Stageperiode III (Uittreksel Stagerichtlijnen IMTA Teaching Faculty NL)**

De student Manuele Therapie werkt met dezelfde patiënten als in de vorige stageperiodes, maar ook met patiënten in een meer complexe samenhang (chronische multidimensionele problematiek) Hij/zij beoordeelt op basis van de verwijzing en hulpvraag van de of fysio- & manuele therapie zijn geïndiceerd. In deze vraagstelling worden inzichten met betrekking tot *severity, irritability* en zogenaamde *nature*-factoren betrokken en de student maakt een kritische beoordeling of deze factoren bij de betrokken patiënt vanuit een multidimensioneel perspectief moeten worden beoordeeld.
De behandelingsdoelen en de keuze van interventies worden in een gemeenschappelijk proces met de patiënt bepaald (*collaborative goalsetting / “Auftragsklärung”).*

De student Manuele Therapie toont een hoog niveau van reflectie en kritische analyse van de eigen communicatie, het persoonlijk handelen en de *clinical reasoning* processen. Dit wordt uitgedrukt in de planning en uitvoering van alle zittingen met de patiënt en in de discussies met de stagebegeleider.

De student Manuele Therapie past de verworven vaardigheden in complexe en multidimensionele situaties toe en past de behandelingsplan, behandeling, communicatie en scholing aan de patiënt en diens individuele situatie aan. Hij/zij kan onder omstandigheden bewust zog. *narrative clinical reasoning processen* inzetten
Bij de scholing en informatie van de patiënt past hij/zij verschillende educatieve strategieën of modellen toe.

De student Manuele Therapie is in staat te beoordelen of mogelijke “*Grade V*” technieken (manipulaties) zijn geïndiceerd en past deze toe volgens de richtlijnen van de opleiding.
De student toont bij alle *assessment*-procedures en de uitvoering en keuze van onderzoeks- en behandelings-technieken het niveau voor IMTA Level 2B en/of Level 3 cursussen (ref. Curriculum & Syllabus IMTA).

Samenvatting beoordeling Patiëntensessies 1 & 2 / MCP III

Kandidaat: ……

Data examen: zitting 1 …… Zitting 2 ……

Plaats: ……

Naam Examinator 1: ……

Naam Examinator 2: ……

Gemiddeld puntengetal

Puntental Examinator 1			
Puntental Examinator 2			
Totaal*		**:2 =**	☐ **Voldoende** ☐ **Onvoldoende**

***Indien het verschil in gegeven punten tussen beide examinatoren meer dan 15% bedraagt, moeten de examinatoren de opleidingscoördinator consulteren, voordat een definitief cijfer wordt gegeven**

Motivatie beoordeling

	Positieve punten	**Kritische punten**
Begroeting & 1. Informatie van de patiënt		
Anamnese		
Planning		
Funktieonderzoek & Rx1		
Reflectie Zitting 1 & Gespre met examinatoren		
Planning Zitting 2		
Uitvoering zitting 2		
Reflectie Zitting 2 & Gespre met examinatoren		
Notering		
Therapeutisch klimaat		
Algemene opmerkingen		

Het examen is voldoende indien
**het hoofdprobleem omvattend is opgenomen en omschreven,*
**een evenwicht tussen procedureel en interactieve reasoning aangetoond werd, *Gevarensituaties voldoende werden gerespecteerd *onderzoek en behandeling compleet, probleem- en patiënten-georiënteerd met valide technieken werden uitgevoerd.*
Bovendien toont de kandidaat aan dat hij/zij de stappen en overwegingen in de gesprekken met de examinatoren voldoende heeft gereflecteerd en beredeneerd.
De secties Anamnese, Functieonderzoek, Uitvoering zitting 2 moeten als voldoende zijn beoordeeld

…… ……..

Naam & Handtekening examinator1 Naam & Handtekening kandidaat

……

Naam & Handtekening examinator 2

Examinatorengesprek: Vragen mbt reflectie & toegepaste theoretische kennis

Reflectie over de afloop van het onderzoeks- en behandelingsproces (samenvatting wezenlijke punten C/O, P/E, Rx; reflectie over gemaakte keuzes, hypotheses, forward reasoning mbt mogelijke reacties, keuze van onderzoek en behandeling)
Hypotheses: - bronnen - bijdragende factoren - pathobiologische (weefsel)mechanismes, neurofysiologische pijn mechanismes - gevarensituaties & contraindicaties - individueel ziektebeleven - management - prognose
Klinisch patroon herkenbaar – en de consequenties voor P/E en Rx? (bijv. achtergrondpathologie; een- of meercomponenten bewegingsstoornissen; een- of meerdimensionele benadering)
Pathobiologische processen algemeen - achtergrondkennis pathobiologische processen
Fysiologie - neurofysiologie van pijn - bindweefselfysiologie en genezingsprocessen - training en weefselprikkels
Biomechanica - arthrogeen - myogeen - weke delen - neurodynamisch - Functioneel anatomische relaties
Gedragstherapeutisch - fases van gedragsverandering - coping strategieën - algemeen gedrag als „output“ van het menselijk systeem - Communicatietechnieken – incl „Auftragsklärung“ (collaborative goalsetting) - Educatie, motivatie
Evidentie – wetenschappelijke basis - keuze van onderzoeksprocedures (C/O, P/E) - keuze van behandelingsprocedures, incl. communicatie, educatie.

Beoordelingsformulier Examinator

Naam Kandidaat: ……

Naam Examinator: ……

De beoordelingscriteria, incl. het maximale aantal punten, zijn per sectie beschreven. Tijdens de diagnostische toetsen worden alle secties beoordeeld

De secties hebben een verschillend puntental; is een sectie voldoende, dan worden 60% of meer van het aantal mogelijke punten gegeven. Is een sectie onvoldoende, dan worden maximaal 59% of minder van het aantal mogelijke punten gegeven.

Thema & max. aantal punten	Opmerkingen Positieve punten	Opmerkingen Kritische aspecten	Punten
Begroeting & eerste informatie (4) • Joining / bonding • Verwachtingen nagevraags / Paradigmas FT uitgelegd • Setting en afloop uitgelegd • Toont begrip voor evt. grenzen bij de patiënt			
Anamnese (12) • Hoofdprobleem opgenomen, incl. body-chart; 24h gedrag &. Coping Strategieën; Hx met retrosp. assessment & Effecten Rx; SQ • Voldoende ** om in Rx2 te kunnen vergelijken • Contra-indicaties, gevarensituaties nagevraagd • Toont hypothesen-geörientieerde vraagstijl • Tijdsgebruik adequaat • Vraag- en communicatiestijl aangepast aan patiënt • Reageert op sleutelwoorden/ -gestes			
Planning (8) • Samenvatting C/O (voor patiënt / FT) • Hypotheses compleet • Dosering aangepast • SCHRIFTELIJKE afloop (‚draaiboek') systematisch, kompleet, inckl planning van reassessments genoteerd • Indicaties op forward reasoning, afh. van de mog. Resultaten in reassessment; forw. reas. Mbt behandelingsresultaten**n**			
Functieonderzoek /Rx1 (15) • Keuze van testen: doelgericht; aan hypotheses aangepast • Doorvoering / kwaliteit van testen consequent • Testen aan patiënt en zijn/haar indiv. situatie aangepast; logische opbouw onderzoeksprocedures • Gevarensituaties gerespecteerd / voorzichtsmaatregels uitgevoerd • Voldoende vergelijkbare tekens opgenomen • Reassessment op correcte momenten; begeleidt patiënt in eigenwaarneming • Tijdsgebruik adequaat • Flexibel – aanpassen aan uitspraken van patiënt, nieuwe informaties of veranderende hypotheses • Communicatie tijdens de technieken • Rx aangepast aan onderzoeksresultaten, incl. relevant selfmanagement, indien van toepassing • Validiteit, kwaliteit P/E en Rx Techniken: uitgh. pat, ultgh FT, handgrepen, uitvoering (graad, ritme, aan P, R, S aangepast) • Afsluiting van de zitting, samenvatting, uitleg aan patiënt, open vragen beantwoorden, instructies/opdrachten/aanbevelingen voor de patiënt			
Gesprek met stagebegeleider (15) • Eigenreflectie direct na zitting: samenvatting van info., incl hypotheses en consquenties voor Rx2 compleet en gemotiveerd (belangrijkste punten samengevat en gemotiveerd). Ook: uitdrukking van een bewustheid over de gevormde en evt. gemodificeerde hypotheses tijdens de zitting (metacognitie) • Hypotheses compleet, meerdere hypotheses; gebaseerd op informatie uit C/O, P/E, Rx • Patroonherkenning, incl. cnsequenties voor P/E en Rx • Adequate antwoorden op vragen van de examinatoren – indicatie op voldoende theoretische achtergrondkennis om symptomen, onderzuoeksresultaten, Rx en therapeutisch klimaat te motiveren resp. te beredeneren			
Planning zitting 2 (8) • Hypotheses compleet, diepgaand, gemotiveerd • Afloop van 2. zitting compleet, systematisch gepland en opgeschreven • Voorplanning van de 3. zitting aanwezig • Overwegingen mbt Rx en selfmanagement aanwezig (volgens ICF; doelen op korte en lagne termijn gedefinieerd)			

Blz 2 – beoordelingsformulier diagnostische toets patiëntensessie

Zitting 2 (13) • Begroeting / info aan patiënt over afloop • Afloop volgens paln / kan beredeneren waarom van het plan moest worden afgeweken • Plan aangepast aan patiënt • Keuze van testen doelgericht, aan hypotheses aangepast • Logische opbouw van onderzoeksprocedures • Rx, incl. self-management: aangepast aan onderzoeksresultaten en aan patiënts • Gevarensituaties gerespecteerd / Voorzichtigheidmaatregels uitgevoerd • Reassessment op adequate momenten; begeleiding van patiënt in ontwikkeling van eigenwaarneming tijdens reassessments • Tijdsgebruik adequaat • Communicatie en uitleg tijdens de technieken • Validiteit en kwaliteit P/E en Rx technieken: Uitgh. Pat, Ultgh FT, handgrepen, uitvoering (graad, ritme, aan P, R, S aangepast) • Afsluiting van de zitting, samenvatting, uitleg aan patiënt, open vragen beantwoorden, instructies /opdrachten/aanbevelingen voor de patiënt			
Therapeutisch klimaat Dag 1 & 2 (8) • Empathie, waardering – toont begrip voor de situatie van de patiënt • Adequate reactie op uitspraken van de patiënt • Informatie en instructies zijn duidelijk en begrijpelijk voor de i • Patiënt wordt in beslissingen betrokken • Handelingen en hypotheses worden de patiënt op adequate momenten regelmatig meegedeeld			
Notering (Dag 1, Dag 2) (7) • Duidelijk, overzichtelijk, POMR/ SOAP-formaat (= formaat opleiding) • Telegramstijl – gemakkelijk teruig te lezen • Belangrijkste punten opgeschreven			
Gesprek met stagebegeleider (10) • Eigenreflectie direct na zitting: samenvatting van de informatie incl. hypotheses en consequenties voor Rx3-4 compleet; metacognitie over hypotheses resp. -modificering • Hypotheses compleet, diepgaand; meerdere hypotheses; beredeneerd op basis van informatie uit C/O, P/E, Rx); Patroonherkenning, incl. consequenties voor P/E en Rx • Adequate antwoorden op vragen van examinatoren – indicatie op voldoende theoretische achtergrondkennis om symptomen, onderzoeksresultaten, Rx en therapeutisch klimaat te motiveren resp. te beredeneren • Toont na 2 zittingen een duidelijk begrip over het probleem van de patiënt, incl. verdere handelingen mbt onderzoek, behandeling en prognose			

Beoordeling na 2 zittingen: aantal punten: ..... / 100

*Het examen is voldoende indien *het hoofdprobleem opgenomen en omschreven is, *een evenwicht tussen procedureel en interactive reasoning aangetoond werd, *Gevarensituaties voldoende werden gerespecteerd en het *onderzoek en behandeling compleet, probleem.- en patiënten-georienteerd met valide technieken werden uitgevoerd. Bovendien toont de kandidaat aan dat hij/zij de stappen en overwegingen in de gesprekken met de examinatoren voldoende heeft gereflecteerd en beredeneerd.*

…….. ……

Plaats, datum Naam & Handtekening Examinator

Verslag afloop patiëntensessies

Naam: .....Plaats, Datum: .....

Kandidaat op tijd ja / neen Pat. op tijd ja / neen Kandidaat heeft benodigd materiaal meegebracht ja / neen

De gecommitteerde maakt in korte punten een chronologisch verslag van de afloop van het examen; dit betreft handelingen en uitspraken van de examen-kandidaat en, indien zinvol, van de patiënt

Tijd	Verslag	Opmerkingen gecommitteerde

Tijd	Verslag	Opmerkingen gecommitteerde

.....
Plaats, Datum

.....
Naam & Handtekening examinator

CAP beoordelingsformulier / schriftelijk

Naam student: .....

Artikeltitel: .....

Artikelsamenvatting: 1 2 3

Criterium	V	O		Opmerkingen
1.Research-vraag goed gedefinieerd 2. Achtergrond van de studie duidelijk samengevat 3. Inclusie- & Exclusie criteria / selectie van deelnemers voldoende beschreven 4. Study design, studielocatie, outcomeaspecten / discussie, resultaten / conclusie omvattend beschreven 5.Commentaar studieauteurs opgenomen 6.Discussie student - diepgaande, omvattend beschrijving van de klinische waarde - Discussie met crossreferenties naar relevante artikelen - Discussie op constructieve manier geformuleerd			1) Niet duidelijk gedefinieerd 2) Geen / onduidelijke samenvatting 3) Geen / oppervlakkige beschrijving 4) Oppervlakkige / geen beschrijving 5) Niet opgenomen 6) Discussie student - alleen beschrijvend, geen discussie - Geen crossreferenties naar relevante artikelen - Destructief, vernederend taalgebruik	

V = Voldoende O = Onvoldoende

Positieve punten	Kritische punten
Motivatie voor beoordeling / aanbevelingen	

Beoordeling: aan de criteria is ☐ voldoende ☐ onvoldoende voldaan.

Opdracht: ……..

....

Plaats, Datum Naam & Handtekening beoordeler

Opmerking: alle 3 artikelsamenvattingen moeten als voldoende worden beoordeeld. Hierbij wordt vooral de proceskwaliteit beoordeeld: is een stijgende lijn in de kwaliteit van de CAP waar te nemen?

Indien 2 of meer artikelen als onvoldoende zijn beoordeeld, moeten nieuwe samenvattingen worden afgegeven / de CAPs volgens de suggesties van de beoordeler worden aangepast.

CLINICAL CASE REPORT – schriftelijke presentatie

Beoordelingscriteria Clinical Case Report

Het clinical case report wordt met de criteria "uitstekend – goed – voldoende – onvoldoende" beoordeeld.

De volgende aspecten worden beoordeeld:

- Inhoud: max. 40 punten
- Discussie & conclusie: max. 40 punten
- Presentatie & stijl: max. 20 punten

De volgende beoordelingscriteria worden gevolgd:

Uitstekend:
(≥ 85.00 Punten / 100)
Logische, duidelijke presentatie met een kritische analyse en overwogen, substantiële benadering. Relevant gebruik van bronnen en andere ressources. De studie toont een duidelijk begrip van theorie en praktijk aan en legt een verbinding tussen beide gebieden. Goed taalgebruik. De studie volgt het voorgeschreven formaat. Algemeen een uitstekende presentatie, met een consequente, logische opbouw (inhoudelijk, taalkundig, grafisch)

Goed:
(≥ 70 – 84.9 punten)
Een presentatie boven de doorsnee. Goed gebruik van bronnen en andere ressources. Logische opbouw met een goede aanzet in kritische discussie en een rechtvaardiging van de argumenten. Verbindingen tussen theorie en praktijk gelegd. Presentatie volgt grotendeels het voorgeschreven formaat (inhoudelijk, taalkundig, grafisch)

Voldoende
(≥ 60 – 69.9 Punten)
Doorsnee: relevant materiaal wordt gebruikt, dat voldoende begrip voor het thema aantoont. Duidelijke indicaties theorie en praktijk met elkaar in verbinding te brengen. Voldoende presentatie, volgt echter het voorgeschreven formaat niet volledig resp. De logische opbouw is niet altijd aanwezig (inhoudelijk, taalkundig, grafisch)

Onvoldoende:
(≤ 59.9 Punten / 100)
Standaard van het werk is niet adequaat m.b.t. inhoud en presentatie. Geen discussie. Geen verbinding tussen theorie en praktijk. Te weinig gebruik van bronnen en andere ressources. Inadequate presentatie. (inhoudelijk, taalkundig, grafisch)

School Grading system per country	Excellent	Very Good	Good	Satisfactory	Adequate	Inadequate
Netherlands	9.0 - 10	8.0 – 8.9	7.0 – 7.9	6.0 – 6.9	5.5 – 5.9	< 5.5
Germany *DVMT*	1.5 – 1.0 *(1.0)*	1.6 – 2.0 *(1.3)*	2.1 – 2.5 *(1.7, 2.0, 2.3)*	2.6 – 3.5 *(2.7, 3.0, 3.3)*	1.6 – 4.0 *(3.7)*	< 4.1 – 5.0 *(4.0 – 5.0)*
Switzerland	5.6 – 6.0	5.1 – 5.5	4.6 – 5.0	4.1 – 4.5	4.0	< 4.0
United Kingdom						

Beoordelingsformulier Clinical Case Report

Student:

Thema:

Datum:

	U	G	V	O		
Inhoud						**40**
• Diepgaand	X	X	X	X	• Oppervlakkig	
• Inleiding tot case report duidelijk, beknopt, kernachtig	X	X	X	X	• Onduidelijke inleiding tot het case report	
• Klinische informatie nauwkeurig, ter zake doende, omvattend (C/O, P/E, outcome-beoordelingen / reassessments)	X	X	X	X	• Klinische informatie is vaag, onvolledig, te weinig precies beschreven	
• Reflectie over de clinical reasoning processen, hypotheses, differentiaal diagnostiek volledig	X X	X X	X X	X X	• Geen reflectie / clinical reasoning processen zijn niet expliciet gemaakt	
• Aanwijzing op diepgaande literatuurkennis en –gebruik	X	X	X	X	• Beperkte literatuurkennis / achtergrondliteratuur gepresenteerd	
• Adequaat referentiegebruik	X	X	X	X	• Zwak referentiegebruik	
• Originele referenties	X	X	X	X	• Te veel secundaire referenties	
• Relevant thema	X	X	X	X	• Geen relevantie	
Discussie & conclusie						**40**
• Kritisch / Analytisch vergelijkend, constructief contrasterend / confronterend	X	X	X	X	• Beschrijvend	
• Logische progressie in de discussie	X	X	X	X	• Geen structuur in de discussie	
• Goede onderbouwing van beslissingen / keuzes en van de discussie punten vanuit de vakliteratuur	X X	X X	X X	X X	• Onderbouwing onvolledig	
• Duidelijke synthese van de discussiepunten in de conclusie	X	X	X	X	• Synthese van discussiepunten ontbreekt	
• Diepgaande toekomstige implicaties voor klinisch werk en verder wetenschappelijk onderzoek beschreven	X	X	X	X	• Geen / slechts oppervlakkige aanbevelingen in de conclusie gegeven	
Presentatie / Stijl						**20**
• Goed gestructureerd, opbouw in onderdelen logisch	X	X	X	X	• Ongestructureerd, springend	
• Goed taalkundige & grammaticale structuur	X	X	X	X	• Slechte taalkundige. & grammaticale. structuur	
• Overgangen in de tekstdelen aanwezig	X	X	X	X	• Geen overgangen aanwezig	
• Lengte van artikel adequaat	X	X	X	X	• Te lang / te kort	
• Volgt het voorgeschreven formaat (tekstafstand, lettergrootte, referentieformaat)	X	X	X	X	• Volgt het voorgeschreven formaat niet	
• Goede algemene presentatie van de lit. studie	X	X	X	X	• Onvoldoende algemene presentatie	
Commentaar						

Beoordeling: ..... punten / 100: Uitstekend / Goed / Voldoende / Onvoldoende*

Examinator: Elly Hengeveld
MSc, B.Health (PT), OMTsvomp, Clin. Spec Physioswiss/MSK, Senior Teacher IMTA

*Voorwaarden bij onvoldoende: .....

.....

8.2.3 Evaluation form: Clinical Case Report – verbal presentation

Op de examendag presenteert de student het Clinical Case Report mondeling aan een groep van medestudenten en examinatoren. Voor de presentatie geeft de candidaat aan de examinatoren en de medestudenten een korte schriftelijke samenvatting *('presentation plan'*) af.

De presentatie duurt 15', Gevolgd door een discussie van 10' met de studiegenoten en examinatoren.
Daarna vindt direct de beoordeling plaats.
Dit tijdschema wordt strikt aangehouden.

De beoordeling verloopt als volgt:

- een beoordelingsformulier wordt gebruikt
- Ter bevordering van reflective practice binnen volwassenen onderwijs wordt de beoordeling door verschillenden personen / groepen gegeven:
  - zelfbeoordeling door de candidaat; deze beoordeling telt voor 10% van de eindbeoordeling mondelinge literatuurstudie mee
  - beoordeling door een groep van 3 medestudenten; deze beoordeling telt voor 30% van de eindbeoordeling mondelinge literatuurstudie mee
  - beoordeling door de examinator / gecommitteerde; deze beoordeling telt voor 60% van de eindbeoordeling mondelinge literatuurstudie mee

Rekenvoorbeeld:

Elke beoordelingsgroep gebuikt het beoordelingsformulier en geeft een aantal punten (maximaal 100)				
	Examinatoren	Zelf	Medestudenten (gezamenlijk)	Eindbeoordeling
Maximale beoordeling (100 punten)	100	100	100	100
Percentage	60%	10%	30%	
Voorbeeld (punten=	85	70	80	
Aandeel in de eindbeoordeling	51	7	24	82

Nb: Indien het verschil tussen de examinatoren en de medestudenten/zelfbeoordeling meer dan 15% uitmaakt, vindt eerst een discussie met alle examinatorengroepen plaats – een aanpassing van het cijfer tbv. eindbeoordeling vindt daarbij plaats

- Beoordelingsschema: er worden maximaal 100 punten afgegeven
  ≥85-100: uitstekend
  ≥70 -84.9: goed
  ≥60 -69.9: voldoende
  < 59.9: onvoldoende
- De volgende criteria worden gehandhaafd:
  - Uitstekend: volledig presentatieplan, inhoud van de presentatie volgt een logische opbouw; presentatie, organisatie, interactie met toehoorders zijn optimaal. Discussie verloopt constructief en wordt voor verdieping van leerprocessen gebruikt.
  - goed: lesplan nagenoeg volledig. Inhoud is goed opgebouwd. Kleinigheden ontbreken in presentatie, organisatie, interactie. Discussie heeft defensieve aspecten
  - voldoende: de presentatie voldoet aan de eisen – dit betekent dat de presentatiedoelen zijn bereikt. Er ontbreken echter belangrijke aspecten, die bij herhaling van de presentatie moeten worden verbeterd.
  - onvoldoende: inhoudelijk onvoldoende doordat de doelen van het presentatieplan niet zijn bereikt. Presentatie en organisatie hebben grote tekortkomingen. Discussie verloopt defensief.

- Er wordt bij het handhaven van de criteria op de volgende aspecten gelet:

  - Lesplan: leerdoelen, voorkennis, inleiding, opdelen van het thema in subgroepen, afsluiting, gebruik van presentatiemateriaal en tijdsplanning zijn vermeld
  - inhoud: de inhoud komt met de schriftelijke literatuurstudie overeen en met het afgegeven lesplan. Aangepast aan het niveau van de groep
  - Organisatie: logische opbouw, klaarleggen van materiaal, gebruik van tijd
  - Presentatie: verbale & non verbale presentatie coherent; zinnen worden afgemaakt; gebruik van audiovisuele middelen ter ondersteuning van de inhoud (andere kanalen buiten het audio-kanaal worden zinvol ingezet) motiverend en stimulerend voor de toehoorder
  - Interactie met de groep dmv bijv.oogcontact, in inleiding contact met groep gelgd dmv.
  - Discussie: constructief op vragen ingaan en de discussie voor verdieping van het leerproces benutten.

Beoordelingsformulier mondelinge presentatie – clinical case report

Candidaat: ……..……..……..…….

Datum: ……

Plaats: ……..……..……

Beoordeling Examinatoren / Studiegenoten / Student *(doorstrepen wat niet van toepassing is)*

Namen: ……..……..…….

	U	G	V	OW	Positieve Punten	Kritische punten	Max. punten
Lesplan							**15**
Inhoud van presentatie							**20**
Presentatie *Verbale presentatie* *Non verbal presentatie* *Gebruik van audiovisuele middelen* *Algemene presentatie*							**20**
Organisatie							**20**
Interactie met groep tijdens presentatie & discussie *Interactie* *Motivatie & Stimulatie* *Beantwoorden van vragen*							**10**
Discussie							**15**

Aangepast aan IMTA evaluationsheet teaching sequences. Curriculum & Syllabus Teachers' Training IMTA

U = uitstekend G = goed V = voldoende O = onvolödoende

…… …….. ……

Plaats, datume Handtekening examinator(en) Signature Teacher-Candidate

Eindbeoordeling:

	Candidaat	Medestudenten	Examinator	Eindcijfer
Aantal punten				Totaal:
Percentage	10%:	30%:	60%:	

Feedbackformulier Leerbericht: Reflectie over leerproces

Naam .....

Beoordeling Student* / Docent

Reflectie over begin van de opleiding – mbt „knowledge“, „skils“, „attributes“; sterkte-zwakte analyse; persoonlijke leerdoelen; open, veelzijdig, kritisch ..... / 25**
Leerontwikkeling tijdens opleiding – herkennen van kritische momenten, waar veranderingen in „denken, voelen en/of handelen“ hebben plaatsgevonden; andere leerdoelen en aspecten, die tijdens de opleiding duidelijk werden; keerpunten, hindernissen, gedragswijzen; herkennen van ingenomen rol tijdens opleiding (leergroep, onderwijs, ... / 25**
Reflectie over het einde van de opleiding – mbt „skils“, „attributes“; sterkte-zwakte analyse; open, veelzijdig, kritisch ..... / 25**
Verloop na de opleiding – verdere ontwikkeling; persoonlijke leerdoelen, gebruik maken van de verworven kennis, vaardigheden, mogelijke veranderde instelling; concrete stappen ..... / 25**

*Per aspect zijn maximaal 25 punten mogelijk

** De beoordeling bevat een eigenbeoordeling door de student en een beoordeling door een docent van de opleiding. Het gemiddelde getal van beide beoordelingen bepaalt het eindcijfer. Bij een verschil van meer dan 15% tussen de eigen- en docentenbeoordeling moet eerst een gesprek tussen beiden plaatsvinden, voordat de definitieve beoordeling wordt gegeven.

Beoordeling ..... Punten / maximaal 100 punten

Uitstekend:	80 – 100 Punten
Goed:	70 – 79 Punten
Voldoende:	60 – 69 Punten
Onvoldoende:	<59 Punten

....

Plaats, Datum Handtekening