



## **IFSHT Hand Therapy Practice Profile**

This profile is compiled by the IFSHT Education Committee for publication on the IFSHT Website and has been approved by the IFSHT executive committee for presentation to council for endorsement.

The aim of this reference document is to provide an international profile of the scope of practice of hand therapy globally addressing the question: "What is hand therapy?" This document outlines the common elements of the advanced knowledge, clinical practice skills and core competencies that have been used to define the scope of hand therapy practice in different regions of the world; respecting the range of hand therapy practice within the context of wide-ranging diversity of cultural, educational, legal and health care systems worldwide.

The intent is that this reference document could be used by individual occupational (OT) or physical (PT) therapists, clinical practices, and academic facilities as well as organized hand therapy associations or societies to assist in the development of an educational plan or programme of hand therapy education. The intent of this document is not to have IFSHT move towards developing an 'International' certification process within the practice of hand therapy. However, IFSHT hopes that countries or organizations that already have an established hand therapy practice credential/award will work closely with other countries or organizations interested in developing a regional or geographic hand therapy practice credential/award by giving assistance and advice on this process.

### ***Acknowledgement***

Extensive work regarding the competencies of a Hand Therapist has already been completed by the Hand Therapy Certification Commission (HTCC) and the Education Committees of the Netherlands, United Kingdom and the European Federation of Societies for Hand Therapy (EFSHT). This document has been developed in part from their hard work and is referenced throughout. In addition, IFSHT recognises the certification process that some countries have already established or are establishing: USA, UK, EFSHT and Australia.

USA:	<a href="http://www.htcc.org">www.htcc.org</a>	Qualification: CHT
UK:	<a href="http://www.hand-therapy.co.uk">www.hand-therapy.co.uk</a>	Qualification: AHT (BAHT)
EFSHT:	<a href="http://www.eurohandtherapy.org">www.eurohandtherapy.org</a>	Qualification: ECHT (work still in progress)
Australia:	<a href="http://www.ahta.com.au">www.ahta.com.au</a>	Qualification: Member Status AHTA

## **International Federation of Societies for Hand Therapy (IFSHT): Hand Therapy Practice Profile**

### **1. Introduction to the IFSHT**

The International Federation of Societies for Hand Therapy (IFSHT) was founded in Paris, France in 1986 when representatives from international countries came together to discuss issues relating to hand therapy rehabilitation. There are now 31 full member and 5 corresponding member countries in IFSHT, representing over 5000 therapists all over the world.

The prime function of the IFSHT is to coordinate the activities of the various societies for Hand Therapy and to increase and enhance the exchange and knowledge of this speciality worldwide.

The objectives of the IFSHT are to encourage high standards of care, education and research within the field of hand therapy and to spread information about hand therapy practice across many countries. It is recognized that by promoting the principles and practise of hand therapy internationally, the number of patients with hand injuries and deformities who receive rehabilitation will increase. This in turn will improve their chances of returning to normal functioning after injury or disease and making a positive contribution to their community.

The IFSHT organizes one scientific meeting every 3 years. Representatives from the member countries meet to discuss issues and plans for the future. Currently clinical practise within the speciality of hand therapy differs widely throughout the world. It is hoped that the establishment of an international hand therapy practice profile including recommended core competencies will enhance the aim of IFSHT to establish common pathways of care for hand rehabilitation across the world. Those therapists with specialist skills in upper extremity rehabilitation will be encouraged to assist those countries who need help in developing post graduate education in this specialized field.

#### **1.1 Introduction to Hand Therapy**

In 2008 the HTCC updated its definition of 'Hand Therapy' as the art and science of rehabilitation of the upper limb, which includes the hand, wrist, elbow and shoulder girdle<sup>1,3</sup>. Hand Therapy has become a specialisation for occupational therapists (OT) and physiotherapists (PT) across the world in theory and practise, combining a comprehensive knowledge of the anatomy, pathology, physiology, biomechanics and function of the upper extremity and conceptual issues involved in rehabilitation.

Improved surgical techniques and medical management enable greater functional restoration of injured and diseased extremities; however, their management requires a skilled and knowledgeable approach. The speciality of hand therapy practice developed as a response to dealing with advanced problems of dysfunction and diseases of the upper extremities, emerging from a combination of the two professions: OT and PT. Interdisciplinary rehabilitation has replaced the traditional boundaries between the two professions. It is felt across the IFSHT countries that joint professional team work between OT, PT and other members of the rehabilitation team is the approach of choice for dealing effectively and efficiently with the complex issues arising in hand rehabilitation.

The European Federation of Societies for Hand Therapy (EFSHT) state in their profile document<sup>4</sup> that Hand Therapists are qualified occupational therapists or physiotherapists who, through advanced continuing education, clinical experience and independent study have gained proficiency in the treatment of upper extremity conditions resulting from trauma, disease, or congenital or acquired deformity. The purpose of a hand therapist is to promote the goals of restoration and maintenance of functioning and prevention of dysfunction for individuals with upper extremity disabling conditions. EFSHT and HTCC<sup>3</sup> recommend that these skills and competencies be developed over at least a 5 year period. As a result of a survey conducted in 2008, HTCC concluded that as well as formal education and practical experience, opportunities should be given for post professional formalised education programmes to teach advanced skills and knowledge related to upper limb rehabilitation.<sup>3</sup>

## **1.2 Current Hand Therapy Practice**

At the present time, it is common practice in most countries that all qualified OT's and PT's can be involved in the treatment of patients with upper extremity problems. The skills required for initiating and carrying out the appropriate treatment following loss of function in the upper extremity after surgery, injury or other disorders are complex. Given this, some countries have started to develop core skills/competencies and standards identified as being crucial for the practice of Hand Therapy. This process has been guided in large part by the paper published by Kasch et al. (2003)<sup>2</sup> which defined competency and outlined potential Hand Therapy competencies. These competencies still vary greatly globally 7 years later due to diverse practice settings and health care systems.

In countries where there is a certification/award education system for the practice of hand therapy, the aim of the qualification is to provide a medium for quality assurance and a clinical ladder for practising therapists. The IFSHT recognises that globally it is not feasible that all patients with hand injuries and illnesses are treated exclusively by therapists with specialized upper extremity clinical practice knowledge, skills and abilities.

## **1.3 Clinical settings for Hand Therapy Practice**

Globally practice settings for occupational and physiotherapists can vary. In general a hand therapist can work in many areas of health care, for example in general hospitals, university hospitals, private practices, rehabilitation centres or nursing homes. In addition to the hand therapist (PT or OT), the therapeutic management of those with upper extremity dysfunction often involves a multidisciplinary team and can include the following health care professions: hand surgeon (plastic or orthopedic Surgeon), plastic surgeon, orthopaedic surgeon, general surgeon, rehabilitation physician, social worker and psychologist. Within some clinical settings there are designated hand management teams, often organised around conditions such as traumatic hand and upper extremity injuries, neurological or rheumatologic hand and upper extremity conditions.

## **2. Core Competencies**

The foundation of hand therapy practice is composed of a comprehensive understanding of the following competencies:

Clinical judgement/clinical reasoning  
Scientific knowledge  
Technical skills  
Interpersonal and Communication skills  
Professionalism  
Resource management.<sup>2</sup>

### **3. Theoretical Knowledge**

A Hand Therapist should be a qualified occupational or physiotherapist who, through advanced continuing education, clinical experience and independent study, has become specialised in the treatment of upper extremity disabling conditions which have resulted from trauma, disease, congenital or acquired abnormality.

The practice of Hand Therapy should strive to recognise the components of health according to the model of the International Classification of Functioning, Disability and Health – ICF, (WHO 2001)<sup>6</sup> and focus on the following domains of practice:<sup>3,4</sup>

#### **3.1 Basic Science and Fundamental Knowledge for Hand Therapy Practice**

Understand and apply knowledge of the theory and principles of anatomy, physiology, kinesiology and biomechanics as they relate to the upper extremity; understand physical properties and expected outcomes of treatment interventions; understand the aetiology, pathology and surgical and medical treatment of conditions affecting the upper extremity.

#### **3.2 Evaluation**

Perform and document all aspects of patient evaluation, including interviews and assessments.

#### **3.3 Prognosis and Plan of Care**

Based on results of the evaluation, determine treatment interventions and expected outcomes. Plan discharge based on progress towards goals. Implement therapeutic interventions. Apply and/or modify therapeutic interventions including patient education and home programmes.

#### **3.4 Implement Therapeutic Interventions**

Apply and modify therapeutic interventions, including patient education and home programmes

#### **3.5 Professional Practise**

Provide ethical safe and fiscally responsible practise, manage personnel, use evidence based practice; interpret and apply research; promote ongoing professional development for self and others; advocate for patients and profession.

The Hand Therapist often starts to work with the patient within days of the injury or surgery, often following them throughout their long-term functional recovery.

Hand therapy practice promotes a patient oriented multidisciplinary team treatment approach. It is important that treatment aims be understood by the whole rehabilitation team and that interventions are well coordinated within the professions.

## **4 Upper Extremity Specialist Knowledge**

### **4.1 Clinical Conditions and Diagnostic Knowledge**

Patients may be referred to a hand therapist for conservative treatment of these conditions or following a variety of medical or surgical interventions. A Hand Therapist should be able to demonstrate skills and knowledge within a range of these conditions and be proficient in assessing, treating and evaluating the outcomes of treatment. These conditions may include:

- amputation
- congenital abnormalities/anomalies
- cumulative trauma disorders/repetitive stress injuries
- Dupuytren's contracture: fasciectomy, fasciotomy
- Fractures/dislocations/joint instabilities: fracture fixation/bone graft
- infections
- inflammatory and degenerative arthritis: arthroplasty, arthrodesis, joint synovectomy
- lymphoedema
- multiple system trauma: replantation, revascularisation, tissue transfers
- pain related syndromes: nerve blocks/sympathectomies
- peripheral nerve compressions and disease : nerve decompression
- peripheral nerve injury : nerve grafts/nerve repairs, neurolysis
- soft tissue injury
- tendon injury and disorders: tendon grafts and repairs, tendon transfers
- thermal injuries: skins grafts, flaps, scar revisions

## **5 Upper Extremity Specialist Skills**

The key principles of hand therapy practice are:

- early intervention
- regular and timely, sometimes highly intensive interventions
- a holistic, patient-oriented approach
- interdisciplinary teamwork
- effective rehabilitation management
- professional education and life-long learning/continuing education
- sound clinical reasoning

### **5.1 Specialist Therapeutic Skills**

The ability to treat patients utilising a variety of techniques and tools including:

- activity
- adaptive/assistive devices
- training in activities of daily living (ADLs)
- behaviour management
- compressive therapy
- desensitisation
- electrical modalities
- ergonomic modification
- exercise
- manual therapy
- oedema control
- patient and family education

- prosthetics
- scar management
- sensory re-education
- splinting/orthotics
- standardised and non-standardised assessment tools
- strengthening
- thermal modalities
- vocational assessment
- work hardening/retraining
- wound care/dressings.<sup>3-4</sup>

## SUMMARY

The IFSHT recognises that a hand therapist should continue to develop and enhance the practice of hand therapy by:

- Working to attain an advanced level of knowledge of the anatomy and physiology of the upper extremity.
- Seeking to achieve a high level and range of therapeutic clinical skills and competencies specific to the management of upper extremity dysfunction
- Striving to contribute to the advancement of the practice of hand therapy through sharing this knowledge

A therapist can develop a high level hand therapy practice knowledge, skills and abilities from a number of sources, including mentored clinical experience, postgraduate education, and independent study. IFSHT recognizes it may take up to 5 years of study and clinical work with upper extremity patients to achieve this broad range of knowledge, skills and competencies.

## References

- <sup>1</sup> Muenzen PM, Kasch MC, Greenberg S, et al: "A New Practise Analysis of Hand Therapy" *Journal of Hand Therapy* 2002;15:215-225
- <sup>2</sup> Kasch MC, Greenberg S, Muenzen PM: "Competencies in Hand Therapy" *Journal of Hand Therapy* 2003;16:49-58
- <sup>3</sup> Dimick MP, Caro CM, Kasch MC, Muenzen PM et al: "2008 Practise Analysis Study of Hand Therapy" *Journal of Hand Therapy* 2009; 22:361-376
- <sup>4</sup> EFSHT Education Committee "EFSHT Hand Therapy Profile" 2009
- <sup>5</sup> The Dutch Hand Therapy Society (NGHT) Committee of Advanced Education. "Hand Therapist Profile" NGHT Concept April 2005.
- <sup>6</sup> World Health Organisation "International Classification of Functioning, Disability and Health (ICF) 2001".

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