

Authors:

Bulley, C., Donaghy, M., Coppoolse, R., Bizzini, M., van Cingel, R., DeCarlo, Dekker, L., M., Grant, M., Meeusen, R., Phillips, N., & Risberg, M.

Supported by Advisors:

Advisors:

de Bie, R., Ganchev, K., Goudswaard, J., Hullegie, W., Oliveira Marreiros Rolf, D., Myers, B., Sole, G., Testa, M., op het Veld, R., & Zito, G..

the SPA Project Core Group:

van Barneveld, B., Cabri, J., Tasheva, R., & Vercelli, G.

and the SPA Website Developers:

Cano, V. & Rasdale, C.

Reference as:

Bulley, C., Donaghy, M., Coppoolse, R., Bizzini, M., van Cingel, R., DeCarlo, M., Dekker, L., Grant, M., Meeusen, R., Phillips, N., & Risberg, M. (2005) Sports Physiotherapy Competencies and Standards. Sports Physiotherapy For All Project. [online] Available at: www.SportsPhysiotherapyForAll.org/publications

Executive Summary: Sports Physiotherapy Competencies and Standards 2005



Sports physiotherapy is a growing specialisation in cultures that strive to promote an active lifestyle and athletic excellence. This document presents competencies and standards that describe the professional behaviours of sports physiotherapists in Europe and explains the background to their development.

The development of competencies and standards represents the first stage of the Sports Physiotherapy for All (SPA) Project. This Leonardo da Vinci funded project aims to promote the mobility and recognition of sports physiotherapists in Europe and beyond, while enhancing safe participation in physical activity and sport.

Competency statements describe effective professional behaviours that integrate specific knowledge, skills and attitudes in a particular context (Ministry for Education, Culture and Science, The Netherlands, 2002). Standards are criteria for performance, describing the level at which competencies should be demonstrated. The competencies and standards were developed in several stages:

1. collection and content analysis of international documentation relating to the attributes and education of sports physiotherapists, where available.
2. discussion of an expert panel leading to cross-validation of themes derived from documentation, leading to the identification of sports physiotherapy roles and behaviours, described in the form of competencies by the researcher
3. internal and external review and revision of the competencies through the SPA Project website
4. acceptance of the competencies at the General Meeting of the International Federation of Sports Physiotherapy, 2004.
5. development of standards relating to each competency, using the themes derived from international documentation and discussion by the expert panel
6. a rigorous process of internal and external review and revision of the standards
7. acceptance of the merged competencies and standards at the General Meeting of the International Federation of Sports Physiotherapy, 2005.

This process led to the development of eleven competencies, designed to demonstrate behaviours expected at a master's level. Standards have been written to describe the specific abilities and behaviours of the sports physiotherapist in a defined context. An audit toolkit will be designed to enable the evaluation of competencies and standards. These will enable sports physiotherapists to provide evidence of their competencies and identify further learning needs.

Sports physiotherapy competencies and standards inform stakeholders, from professional regulators, sports organisations and committees, to employers and educators, and athletes of all levels and abilities. They provide a basis for policy development, enable quality assurance activities, and facilitate individual professional development.



A Leonardo Da Vinci Funded Project

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Section 1: Introduction

1.1 Sports and Physical Activity Participation in Europe

It is well known that an active lifestyle can protect against a variety of health risks, such as heart disease, diabetes, depression and cancer. Regular participation in physical activity also results in positive effects on psychological wellbeing (Department of Health, 2004; National Institute for Clinical Excellence, 2004; World Health Organisation (WHO), 2003a; United States Department of Health and Human Services, 1996). As well as benefiting the individual, there is growing evidence for the economic advantages of an active lifestyle, including reduced absenteeism and increased work productivity (WHO, 2003b)

Despite the benefits, many people are not regularly active, leading to an international drive to encourage greater participation in sport and exercise (WHO, 2004; WHO, 2003c). This document refers to athletes¹ of all levels, and includes those participating in sports¹, exercise¹ and regular physical activity¹.

However, with the hoped-for increases in physical activity participation, health and productivity come some unwanted side effects, including sports injuries¹ (Petridou, 2001).

1: see glossary for definition

1.2 Injuries From Sports and Physical Activity Participation

Sports and recreational physical activity are becoming more popular and associated injuries and illnesses are increasing in frequency. On analysis of the US National Health Interview Survey, an estimated seven million Americans receive medical treatment for sports injuries annually (Conn *et al.*, 2003).

A recent survey of sports injuries occurring in countries within the European Union (EU) estimated that approximately 60 per 1000 sports participants require medical attention for a sports injury every year; further, more than 700 athletes die and approximately 700.000 are hospitalised as a result of sporting injuries. The related cost within the EU is estimated at more than ten billion euros per year (Petridou, 2001).

As sporting and physical activity participation increase, the incidence of related injuries and illnesses is likely to increase as a result. Therefore, greater priority is being placed on injury prevention and evidence-based treatment (Petridou, 2001).

1.3 Preventing Injuries From Sports and Physical Activity Participation

Prevention of sports injuries involves primary, secondary and tertiary strategies. Primary prevention aims to avoid an injury occurring, secondary prevention focuses on optimal treatment of the injury to prevent lasting damage, and tertiary strategies attempt to prevent repetition of the injury (Petridou, 2001).

Physiotherapists can contribute to all three preventive stages.

1.4 Physiotherapy in Europe

A description of Physiotherapy¹ is outlined within the European Physiotherapy Benchmark Statement, adopted by the European Region of the World Confederation for Physical Therapy in 2003 (ER-WCPT, 2003).

This document explains that physiotherapists are independent, autonomous professionals who may be the first point of contact for a patient or client and often work within a multidisciplinary team. They use clinical reasoning and knowledge of current research evidence to diagnose “existing or potential impairments, functional limitations and abilities or disabilities that will direct physiotherapy interventions” (ER-WCPT, 2003: p. 10). Physiotherapists also educate and advise the general public, as well as specific groups.

Physiotherapists have a broad scope of practice in relation to client groups, contexts for practice, and types of intervention. The very diversity of practice in this developing profession has led many practitioners to concentrate on a particular clinical area.

1: see glossary for definition

1.5 Physiotherapy and Specialisation¹

The “complexity and breadth” of the physiotherapy profession has grown beyond the scope of general practice (Bennett & Grant, 2004, p. 4). Continuing professional development is now essential to ensure service quality and has become a professional responsibility (Donaghy & Gosling, 1999).

As the breadth and depth of knowledge and skills within the profession has increased, so have the opportunities for clinical and academic study post-qualification. One physiotherapist cannot reach a great depth of knowledge and skill in the full breadth of clinical areas, so a graduate must be selective as their career progresses. Gradually, higher levels of skill and depth of knowledge are developed in a particular area. Sports physiotherapy is one such area.

1: see glossary for definition

1.6 Specialisation in Sports Physiotherapy

Sports physiotherapy is now recognised as a specialism in many countries. Professional groups and associations have developed to represent their members, facilitate education and training, and ensure good practice (Donaghy & Gosling, 1999).

In 2000 the International Federation of Sports Physiotherapy was established to link the different national sports physiotherapy organisations (IFSP, 2000). Their mission statement is as follows:

“IFSP is a world-wide Federation, recognized as a subgroup of the World Confederation for Physical Therapy (WCPT), representing national organisations of Sports Physiotherapy. The efforts of the IFSP are directed towards Member Organisations and their individual members in serving athletes of all ages and abilities through excellence in education, research, practice, and clinical specialisation. The intention of the IFSP is to be the International resource for Sports Physiotherapists, to promote Sports Physiotherapy through the International Olympic Committee (IOC); International Sports Federations (ISF's) and other professional organisations.”

Participation in sport often occurs within an international context, especially where athletes compete at high levels. For this reason, sports physiotherapy has an international dimension and their practice frequently requires them to travel with individual athletes and groups or teams. This means that being able to practice in different countries is important.

1.7 Professional Mobility in Europe

The Bologna declaration aims to ensure that all Europeans have the right to work in any member state. They actively encourage international mobility, as they state that “learning, training and working in other countries make a major contribution to cross-cultural understanding” (Learning, Teaching and Support Network: LTSN, 2004; Europa, 2004a, b)

Work that requires undergraduate and postgraduate training relies on education processes; these aim to ‘build’ the type of professional required for the task. The work carried out by physiotherapists across Europe is similar in nature but reflects some culture-specific approaches and requirements of employers (European Physiotherapy Benchmark Statement: ER-WCPT, 2003a).

Physiotherapy is a profession that requires national regulation, to ensure safe and effective practice in each cultural context. National organisations are responsible for ensuring that physiotherapists wishing to practice in their country are trained to the required standards. This can be a time-consuming process, both for the organisation and for physiotherapists. Increasing professional mobility of sports physiotherapists in Europe can be facilitated through some changes in postgraduate education.

1.8 Higher Education in Europe

European governments have started to guide changes in higher education institutions to create a European Higher Education Area. This will mean that undergraduate and postgraduate qualifications are more comparable, while maintaining the wealth of cultural diversity (LTSN, 2004).

In time, it is hoped that the promotion of convergence in higher education will enable more professionals to move throughout Europe during their working lives. This goal led to the development of the Sports Physiotherapy for All Project.

1.9 The Sports Physiotherapy for All Project

The Sports Physiotherapy for All (SPA) Project developed in the climate of increasing need for the promotion of:

- mobility and recognition of Sports Physiotherapists in Europe and beyond and
- safe participation in physical activity and sport for Europeans by the development of:
 - European competencies¹ and standards¹ for Sports Physiotherapists
 - an audit tool¹, evaluated in a European context
 - a code of conduct regarding ethical behaviour in relation to doping¹
 - a website interface between research, practice, education and employment
 - an interactive website for continuing professional education and
 - an information resource for public access to Sports Physiotherapy

Professional mobility requires that employers and regulatory bodies throughout the EU know what to expect of a sports physiotherapist. This requires the description of their capabilities and the level at which they can work (competencies and standards).

Explicit guidelines relating to these issues will enable a training route to be developed and a clear pathway for physiotherapists in their ongoing professional development. The audit tool will enable the quality assessment of these processes; this tool will be tested during the project to ensure that it is effective.

Guidelines relating to the skills and attributes of sports physiotherapists, including anti-doping behaviours, and the website information resource will serve two important purposes: advising stakeholders about the capabilities of a sports physiotherapist, and facilitating the development of sports physiotherapists in a European context.

The SPA Project is the result of collaborations between the IFSP and five higher education institutions from different European regions. Representatives from these six organisations form the core group¹ of the SPA project. The project has a variety of international partners: the World Confederation of Physical Therapy, 11 member organisations of the IFSP, the Bulgarian and Dutch National Olympic Committees, the Bulgarian Sports for All Association, and the Portuguese National Sports Institute, and both Basketball and Rugby Federations.

The project is supported by researchers, consultants¹, experts¹ and advisors¹ in the fields of sports physiotherapy and education. World-wide input has been sought from sports physiotherapists, organisations, experts and advisors, in the hope that this document will have an international impact. A full list of participants can be seen in appendix 1 and definitions of their different roles are included in the glossary.

This document is the first stage in the process and introduces sports physiotherapy competencies and standards. The development process is explained, competencies and standards are outlined, and finally, the next stages in the project are introduced.

1: see glossary for definition

Section 2: The Benchmarking Process

2.1 What is Benchmarking?

Benchmark statements describe the attributes¹ you can expect of a person with a certain qualification or title. These descriptions are frequently used by professional organisations that have been required to benchmark their capabilities in association with the education sector. This increases accountability between students, educators, professionals and employers (Quality Assurance Agency for Higher Education: QAA, 2004a).

1: see glossary for definition

2.2 Competencies and Standards

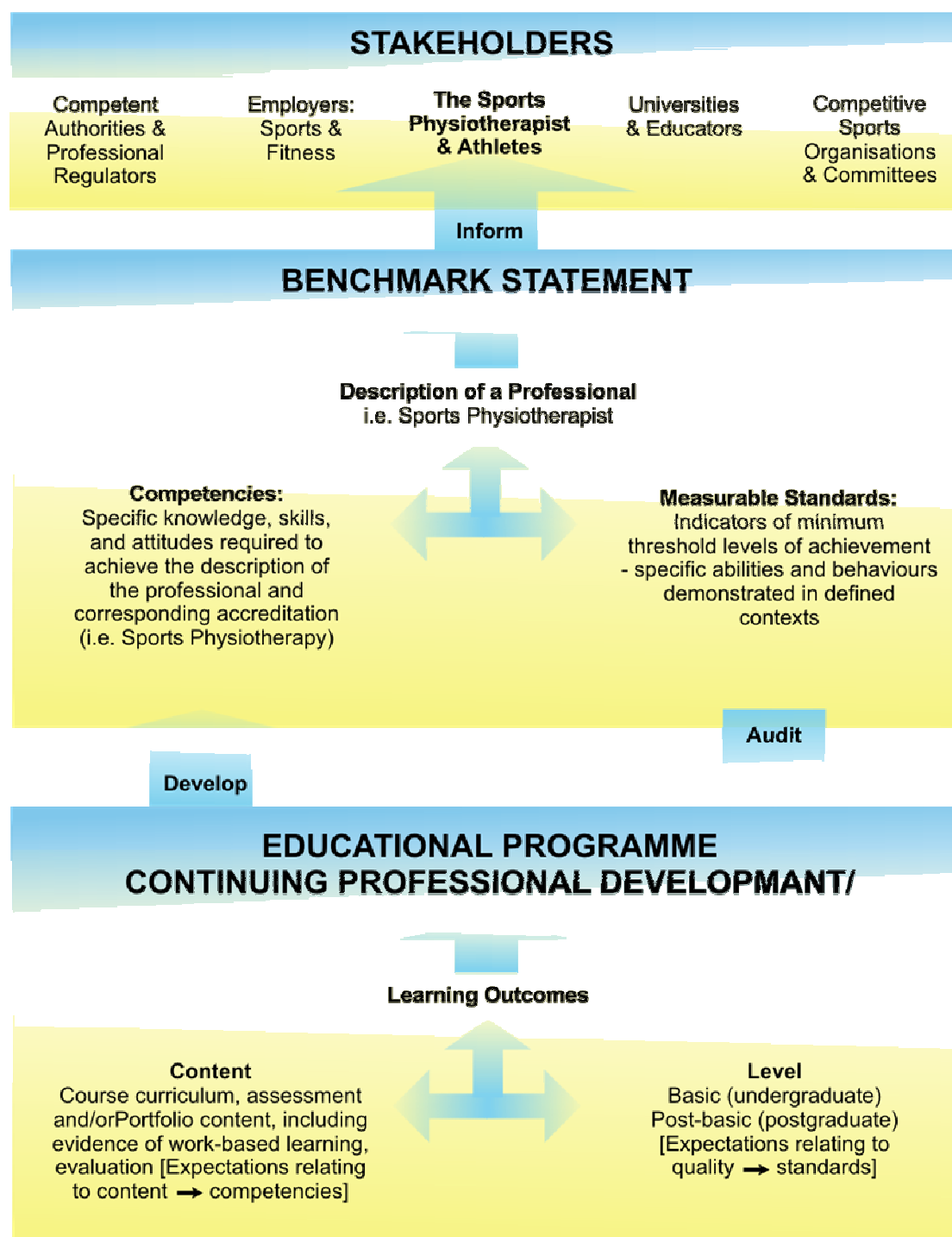
The abilities required of a professional are further defined as competencies and standards.

Competency statements describe effective professional behaviours that integrate specific knowledge, skills and attitudes in a particular context (Ministry for Education, Culture and Science; Netherlands, 2002).

Standards are criteria for performance; they describe the minimum level of capability at which you would expect the professional to work (ER-WCPT, 2003a; LTSN, 2004; QAA, 2004a).

The benchmark structure is illustrated in figure 1 showing the central box that contains competencies and standards. Definitions can be found in the glossary.

Figure 1: Flow Chart Illustrating the Inter-Connections Relating to Benchmark Statements, Educational Programmes and Stakeholders



2.3 Competencies and Standards for Physiotherapy

In the context of physiotherapy, much work has already been done in the benchmarking process. The European Region of the World Confederation of Physical Therapy responded to the international goals of international mobility and employability by developing the European Physiotherapy Benchmark Statement, service standards, and audit tool (ER-WCPT, 2003a, b, c).

These documents detail the competencies and standards expected of individuals using the professional title of physiotherapy in Europe.

2.4 Competencies and Standards for Sports Physiotherapy

The SPA Project aims to build on the existing physiotherapy-specific competencies and standards. Sports Physiotherapists operate under the professional title of 'physiotherapist,' or 'physical therapist,' therefore are expected to be competent at the levels described by the European Region of the WCPT (2003a & b).

An individual calling him or her self a sports physiotherapist should aspire to develop more specific competencies at a higher level of functioning. This document explains the process of selecting and defining these competencies and the associated minimum threshold level of professional behaviour.

2.5 Uses and Influences of the Benchmark Statement

The function of a benchmark statement is illustrated in figure 1.

Firstly, an individual wishing to develop as a sports physiotherapist requires a description of what they are aiming to achieve and how. As explained in the introduction, specialisation in physiotherapy requires further learning to develop professional behaviours that integrate specific knowledge, skills and attitudes.

Competencies represent the aims of professional education, to a level described in the standards. Together, they enable the development of appropriate learning outcomes, the foundations on which educational programmes are developed. By mapping learning outcomes to competencies and standards, educators can ensure that content and assessment of programmes are appropriate. Flexibility and innovation are encouraged in educational developments, within an overall framework of expectations (QAA 2004b).

It must be possible to measure the extent to which learning outcomes are demonstrated in trained individuals, allowing ongoing audit and quality assurance. Competent authorities such as professional and regulatory bodies will require this information.

A variety of stakeholders may then be confident that a sports physiotherapist is competent at the specified level, with defined expertise. A variety of individuals and agencies have an interest in this, including employers, competitive sports organisations and committees, and perhaps most importantly, the public, including athletes.

2.6 Development of the Benchmark Statement

Different agencies are often involved in the development of professional standards and competencies. For example, in the United Kingdom, the Quality Assurance Agency for Higher Education and the Health Professions Council have developed professional competencies, while the national Physiotherapy organisation have produced standards for practice (QAA, 2004b; Health Professions Council: HPC, 2003; Chartered Society of Physiotherapy: CSP, 2000 a, b, c).

However, the SPA Project provides a unique opportunity for the development of all components of the Benchmark Statement in one linear process. This document provides details of the competencies and standards and their development.

The process of competency development requires a framework to facilitate communication and transparency in decision-making. This is described in the next section.

2.7 Development of Competencies in Sports Physiotherapy

The competencies of sports physiotherapists were designed to describe attributes of a Master's level. This has been thoroughly described by the Scottish Credit and Qualifications Framework (SCQF, 2003) and the relevant extract is included as Appendix 2.

A framework for the development of competencies was developed through discussion between the core group of project partners and experts in the fields of sports physiotherapy and competency design. This framework enabled the selection of competency areas and the construction of the competency descriptions.

2.7.1 Competency Areas

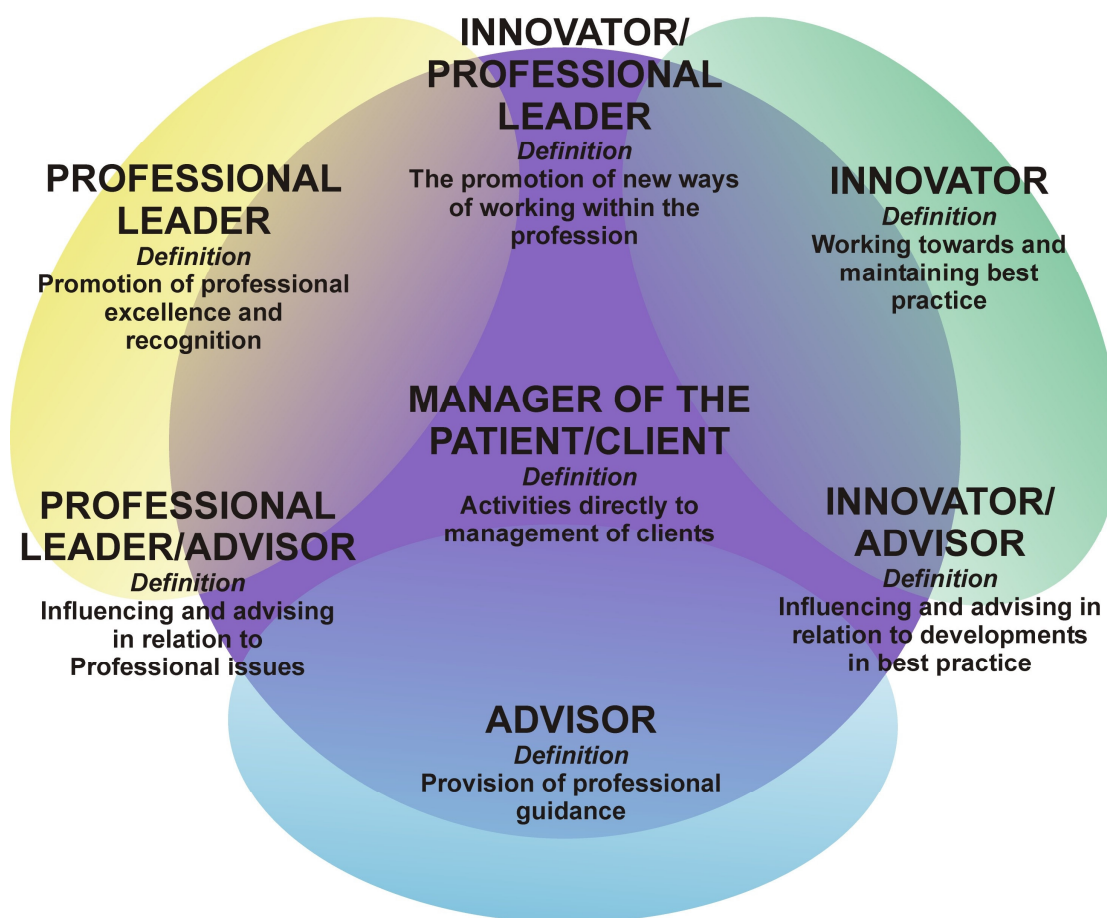
There are several models that have been designed to assist in the process of competency design. One model has been specifically designed for the context of Master's-level physiotherapy education (Coppoolse & Van den Heuvel, 2004). It emphasises professional roles and is useful when thinking about sports physiotherapy (figure 2).

This 'Master's Level Physiotherapy Competency Model' places all areas of function against a background role, labelled: Manager of the Patient/Client. The physiotherapist is seen as having several other roles, which overlap both with managing the patient/client, and with each other. These are: Innovator, Professional Leader and Advisor. Definitions of each role are included in figure 2.

Selection of this model was based on its client-centred philosophy. The overarching role of the physiotherapist places the client at the centre of decision-making processes. Further roles demonstrate the extension of the physiotherapist's competencies into leadership, advising and innovation. While the model illustrates the integration of roles, it provides a structure for the articulation of complex and specialised competencies.

Competencies were designed within each of the roles and in the areas where roles interlink.

Figure 2: **Master's Level Physiotherapy Competency Model**



2.7.2 Competency Construction

Competencies were constructed within each area of sports physiotherapy function, based on the principle that a professional competency statement must be:

- Durable (will not become rapidly outdated)
 - Specific (clear and unambiguous)
 - Inter-connective (integrating knowledge, skills & attitudes)
- (Ministry for Education, Culture and Science; Netherlands, 2002),

To summarise, competencies relate to different professional roles that are specific to specialisation in sports physiotherapy and build on the European Physiotherapy Benchmark Statement (ER-WCPT, 2003a). Each competency demonstrates an effective behaviour that integrates knowledge, skills and attitudes in a specific professional role or context. The next section explains the process of selecting competencies within each of the roles.

2.7.3 Collection and Analysis of International Documentation

The process of selecting specific competencies was rigorous and incorporated international contributions. Relevant international documentation was sought via the IFSP membership, and analysed by one of the SPA Project researchers. This process is briefly described.

Member organisations of the International Federation of Sports Physiotherapy agreed to participate in the SPA Project by assisting in the collection of information. They were sent a letter in February 2004, requesting copies in English of all available information or documentation regarding the following:

- Guidelines that describe the practice of sports physiotherapists – *statements that inform sports physiotherapists in relation to specific areas of assessment / treatment in different sport and clinical contexts.*
- Documentation that describes the attributes and competencies required of sports physiotherapists – *statements relating to their expected skills, advanced / specialist knowledge, scope of activities and attitudes.*
- Standards for sports physiotherapists – *descriptions of minimum levels of quality that are acceptable in relation to different core activities carried out by the sports physiotherapist.*
- Information from postgraduate programmes of sports physiotherapy – *aims, objectives and learning outcomes of sports physiotherapy education, the status of the program in relation to accreditation or non-accreditation, and the program level, for example, bachelors or masters (basic or post-basic).*

Further information was sought using the internet to search for educational materials, such as module descriptors and information from established courses of study. A list of documentation received and analysed is provided in appendix 3.

All information that was collected by the 15th of May, 2004, underwent content analysis for use in a two-day meeting with the Expert Group. Themes were defined as describing areas of professional knowledge, understanding, skills and attitudes described as necessary to sports physiotherapy training and practice. International similarities, as well as differences, were explored.

2.7.4 Selection of Specific Competencies

The Expert Group members were involved in the initial selection of areas for competency design. Information received after this meeting was analysed for the degree of agreement with existing themes. This ensured that no areas of sports physiotherapy and international variation were neglected.

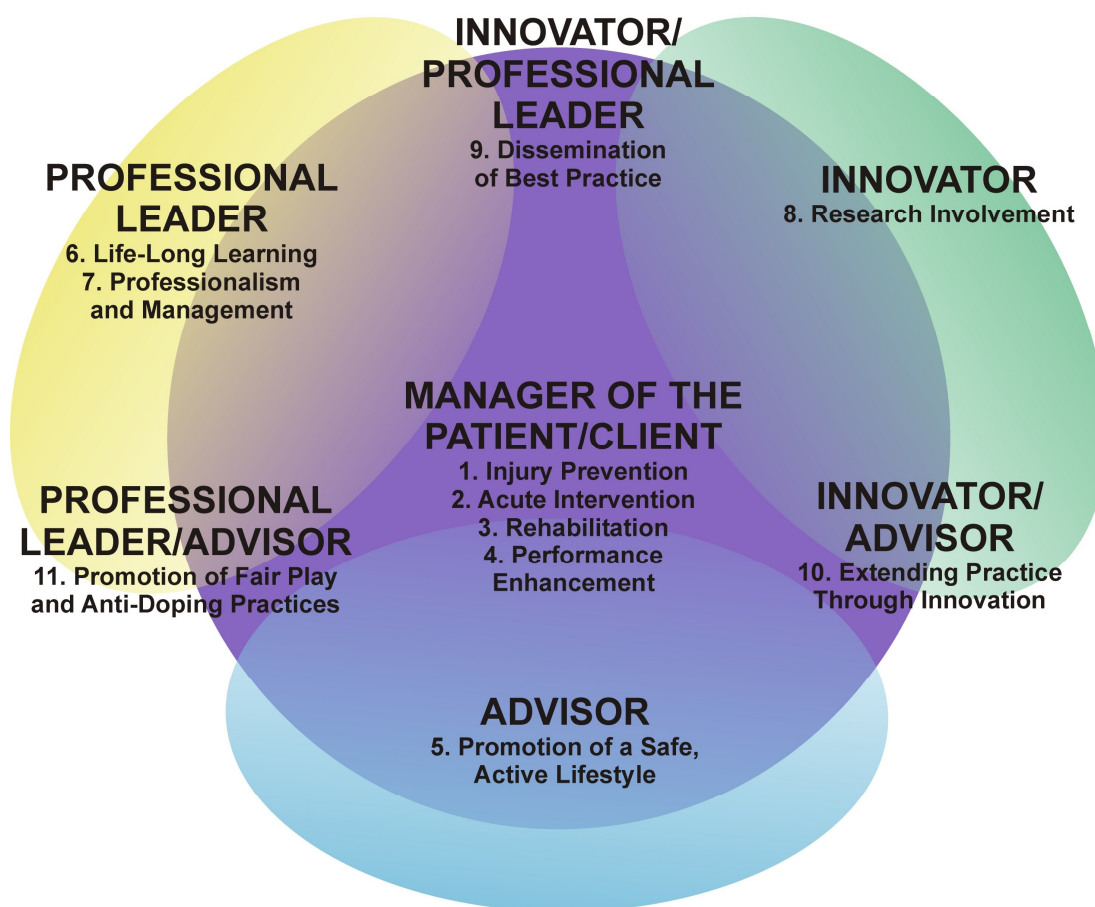
Themes were cross-checked by the expert sports physiotherapists to ensure that they were comprehensive. A cut-and-paste technique was used to allocate individual themes to roles within the competency model (figure 2).

Related themes within each model area were then grouped to allow distinct competencies to be designed. Once consensus was reached, the competency statements were written. Figure 3 summarises the themes within each competency and their location in the model.

Extensive discussion within the Expert Group also enabled definition of the unique aspects of Sports Physiotherapy that make it distinct from general physiotherapy practice. This was a further development of the previously accepted IFSP definition (2001). A more detailed description was devised to supplement the description.

This process allowed the design of competency statements based on the content of international documentation and the views of experts in the field.

Figure 3: **Sports Physiotherapy Competency Areas Within the Master's Level Physiotherapy Competency Model**



2.7.5 Review and Revision

The competency document was subjected to a rigorous process of internal and external review and revision:

- 1) the first draft document provided a basis for a thorough process of internal review and revision through the SPA Project website: core group members, experts, advisors and consultants were all invited to comment on the competencies.
- 2) the second draft document provided a basis for a thorough process of external review and revision through the SPA Project website: all SPA Project participants and all individuals and agencies interested in sports physiotherapy were invited to comment on the competencies.
- 3) the third and final draft document was presented for acceptance by the 2004 General Meeting of the International Federation of Sports Physiotherapy in Estoril, Portugal

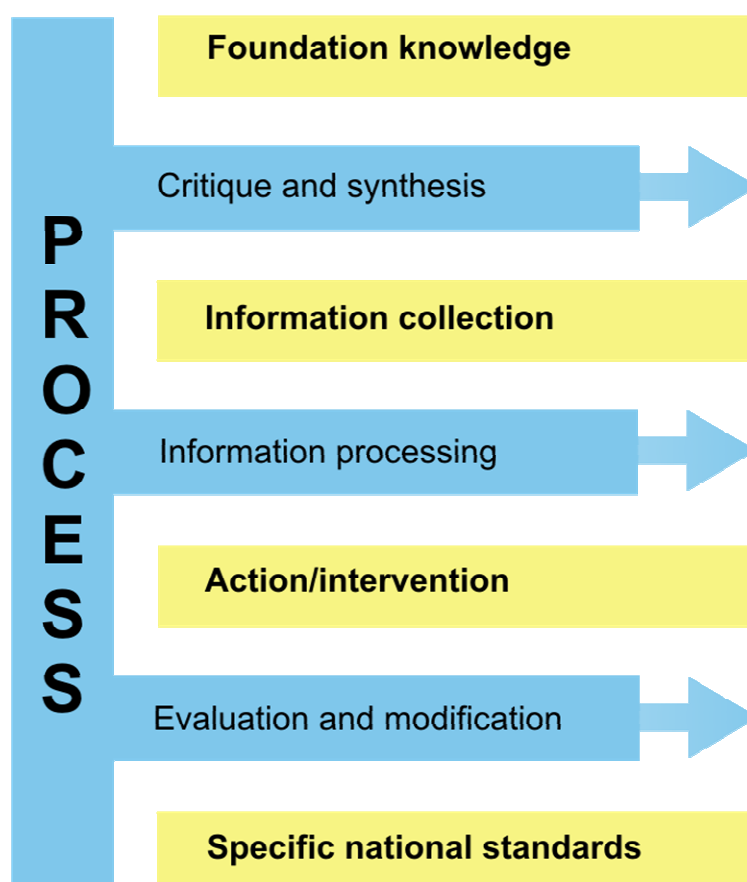
2.8 Sports Physiotherapy Standards: Development

While competencies describe behaviours that integrate specific knowledge, skills and attitudes, standards indicate the level at which these should be demonstrated. They describe specific abilities and behaviours of the sports physiotherapist in a defined context.

2.8.1 Framework for the Sports Physiotherapy Standards

The standards are described as components of a process, illustrated in Figure 4. Foundational knowledge is subjected to critique at a Master's level. A synthesis of this knowledge is used to inform appropriate information collection. Findings are integrated with specific knowledge to inform the clinical reasoning process. As a result the most appropriate and evidence-based intervention is selected, implemented, evaluated, and modified as required. The standards are structured to reflect this process in relation to each of the eleven competencies.

Figure 4: **Sports Physiotherapy Standards Framework (Bulley & Donaghy, 2004)**



The standards were developed by using themes derived from international documentation and through discussion with experts.

Understanding of the specific behaviours of the sports physiotherapist was developed during a second meeting of the expert panel that participated in competency development:

- 1) members of the expert group were each allocated a competency. They spent thirty minutes reflecting on the specific knowledge, skills and attitudes required to fulfil the competency at the minimum threshold level.
- 2) in pairs, the experts shared and further developed their thoughts for feedback to the whole group. This allowed all experts to contribute.
- 3) ideas were further refined and written for use by the researcher
- 4) the researcher triangulated the experts' ideas with themes from international documentation
- 5) the researcher wrote the standards, ensuring that the language included context and level where appropriate
- 6) the first draft document provided a basis for a thorough process of internal review and revision
- 7) the second draft document provided a basis for a thorough process of external review and revision
- 8) the third and final draft document was presented for acceptance by the 2005 General Meeting of the International Federation of Sports Physiotherapy in Oslo, Norway

It is important to note that all specific national information received at the time of publication has been included. National sports physiotherapy organisations are responsible for ensuring that specific national differences are included and updated as appropriate.

2.8.2 Sports Physiotherapy Standards: Content

Standards must describe level of achievement in a measurable way. Master's level includes complexity of cognitive processes, for example, critical reasoning and creative thought. It also requires the ability to work in various contexts. Cognitive level and context are discussed briefly:

Master's level is described in relation to the Scottish Credit and Qualifications Framework: Level 11 (included in appendix 3). This describes Master's level as involving extensive knowledge and skills that demonstrate critical reasoning, flexibility, creativity, independence and leadership.

A conclusive list of assessment and intervention techniques is not provided for the standards. Rapid development of the profession and changing technologies would soon lead to a need to update any list.

The standards emphasise clinical problem-solving: using the techniques available in an evidence-based and clinically-reasoned manner. The techniques selected may be entry-level or advanced; the complex thought processes demonstrated in their selection and application raise practice to Master's level. A continually-updated database of current assessment and intervention techniques would be a useful supplementary resource for future development.

Critical analysis of published research is included in standards relating to different competency areas (for example, rehabilitation), to ensure that evidence-based practice is demonstrated for each professional behaviour.

Where a standard describes a behaviour as occurring "*in different sporting contexts*," the behaviour should be demonstrated in relation to sports, exercise or physical activities that have different requirements. A sports physiotherapist would be expected to demonstrate the achievement of the standard in more than one context. Differences could include:

- more upper or more lower limb activity,
- contact or non-contact sports,
- different types of skill, for example, open or closed chain, different environmental contexts, such as recreation or competition level,
- team or individual sports, and
- involvement of individuals with differing levels of ability and function.

Knowledge is foundational to the development of professional behaviours. Standards that relate to foundational knowledge do not necessarily describe the context of application. The inclusion of specialist knowledge in decision-making ensures that the sports physiotherapist is distinct from general physiotherapists and other specialists.

Standards describe continuous professional behaviours and there is inevitable overlap. For example, in order to achieve the standards included in Section B of each competency area, a sports physiotherapist must be able to critically analyse published research. This is more thoroughly detailed in the standards for Competency 8: Research Involvement. Once developed, the audit toolkit will indicate where evidence can allow you to demonstrate competence in more than one standard.

It is important to note that the sports physiotherapist operates within a multidisciplinary team. The standards aim to describe the physiotherapy-specific contribution of knowledge, skills and attitudes. The standards also emphasise the importance of recognising scope of practice, and appropriate referral to other professionals in the team.

2.9 Evolution of the Competencies and Standards

The competencies and standards are based on a synthesis of the evidence and expert consensus at the time of their development. Understanding in the field will continue to develop and it is anticipated that the knowledge and skills of the sports physiotherapist will do so as a result. Responsibility for consultation and review of the competencies and standards lies with the IFSP and its members.

The definition and description of Sports Physiotherapy are presented first, after which the competencies are outlined with their associated standards.

Section 3: Definition and Description of the Sports Physiotherapist

3.1 Sports Physiotherapist: A Definition

A sports physiotherapist is a recognised professional who demonstrates advanced competencies in the promotion of safe physical activity participation, provision of advice, and adaptation of rehabilitation and training interventions, for the purposes of preventing injury, restoring optimal function, and contributing to the enhancement of sports performance, in athletes of all ages and abilities¹, while ensuring a high standard of professional and ethical practice.

3.2 Sports Physiotherapist: A Description

Sports physiotherapists are professionals who aspire to work at master's level². Sports physiotherapists work with athletes of all ages and abilities, at individual and group levels, to prevent injury, restore optimal function and contribute to the enhancement of sports performance, using sports-specific knowledge, skills and attitudes to achieve best clinical practice.

Sports physiotherapists are pioneers in their field, critically challenging and evaluating practice, developing new knowledge through research, and disseminating this understanding to initiate changes in practice.

In their role as a professional leader, sports physiotherapists influence their professional and multidisciplinary cultures by keeping up to date with new innovations, incorporating them into education, and creating a professional environment that enables the implementation of best practice. They aim to promote safe participation in physical activity, and the sports physiotherapy profession, to the wider community and facilitate international mobility of therapists through education and practice.

Sports Physiotherapists incorporate knowledge and understanding of innovations into the roles they play as advisors at several levels – as case managers (micro level), in service delivery (meso level), and in their influences on policy change (macro level).

At the heart of sports physiotherapists' thinking and behaviour lies understanding of and sensitivity towards the implications of injury for the athlete and the impact on others around them. They maintain independence in their decision-making, ensuring their duty of care to the athlete in a context of many potential conflicts of interest.

1: the description "all ages and abilities" includes specific population groups, for example, children, adolescents, and older people, as well as individuals with impairments that limit their participation. It also describes the difference in sporting ability, from recreational to competitive at different levels.

2: See appendix 2 for a description of master's level. It should be noted that sports physiotherapists have the foundational competencies developed through an undergraduate physiotherapy degree. Work at a master's level is viewed as the threshold level for specialisation in sports physiotherapy. It is recognised that some professionals will progress to PhD and clinical doctorate levels.

Section 4: Sports Physiotherapy Competencies and Standards

The process of developing the competencies and standards has been described in section 2. Competencies have been written for sub-roles within the different roles illustrated in figure 3. This has led to the development of eleven statements regarding the competencies expected of sports physiotherapists. Standards have been developed to supplement each competency description. These are specific behaviours that indicate the minimum level of achievement for each competency.

The first competencies and standards presented are those relating specifically to the overarching role: Manager of the Patient/Client. This role interlinks with the sports physiotherapist's activities as Advisor, Professional Leader, and Innovator; competencies falling into these three categories are presented next. Finally, competencies and standards are presented that relate to the overlaps between broad roles as Innovator, Professional Leader and Advisor.

Both competencies and standards incorporate flexibility for international variation. A space is provided within each competency and its related standards to allow any relevant statements regarding specific national interpretations.

4.1 Manager of the Patient/Client

Sports physiotherapists are involved in the day-to-day management of their clients, involving a continuum of behaviours.

For the purposes of description, these behaviours are separated into four competencies. The first two are injury prevention and acute intervention. The third addresses the period between a physical activity or sport-related injury and the safe return to function, participation, and optimal performance in physical activity, exercise and sport. Lastly, performance enhancement describes a sports physiotherapist's contribution to the multidisciplinary team in relation to enhancing conditions for maximal performance.

- 1 Injury Prevention
- 2 Acute Intervention
- 3 Rehabilitation
- 4 Performance Enhancement

All these competencies involve evidence-based practice: the location, critical analysis, and synthesis of new information to allow judgements regarding the appropriate application of findings to practice.

1

Injury Prevention

Sports physiotherapists assess the risks of injury associated with an athlete's participation in a specific sport or physical activity context; they inform and train athletes and other professionals in a way that reduces the occurrence and recurrence of injuries.

Context:

- preventive activities may occur in clinical practice, training and competition contexts.
- most frequently the sports physiotherapist works within a multidisciplinary context, where their assessments contribute to the development of a complete profile of the athlete.

Behaviours:

- assessment of injury risk - integrating evaluations of:
 - the athlete's physical and psychological performance capacity¹,
 - the influence of factors such as age, coexisting conditions, and previous injury, including associated biomechanical and patho-physiological limitations,
 - requirements of the specific sport or exercise,
 - potential impacts of environments and equipment.
- formation of professional judgements that inform training regimens with the aim of safely increasing the athlete's performance capacity¹, specifically related to the sports or activity context.
- facilitating the development of greater efficiency in movement
- advising and educating athletes and other professionals regarding the risks associated with particular environments and equipment.
- continual updating of knowledge in the field, appropriate integration of new information into decision-making processes.

Specific National Interpretations –

1: The physical capacity of the athlete to perform a sport or physical activity, relating to specific physiological, biomechanical, kinesiological and psychological demands

Standards Relating to Competency 1: Injury Prevention	
A foundational knowledge	
The sports physiotherapist demonstrates the ability to:	
1A: 1	analyse the effects of sport-specific exercise and training on human anatomy, exercise physiology, biomechanics, and movement science <i>in different sporting contexts</i>
1A: 2	integrate sport-specific and scientific knowledge to underpin descriptions of the mechanisms of injury development and the likely severity <i>in different sporting contexts</i>
1A: 3	discuss different intrinsic and extrinsic sport-specific injury risks associated with different population and gender groups
1A: 4	discuss the epidemiology of sports-specific injuries in relation to different population and gender groups <i>in different sporting contexts</i>
1A: 5	analyse the potential impact of sport-specific regulations and equipment on injury risk <i>in different sporting contexts</i>
1A: 6	describe the likely effects of pharmacological agents and nutritional status on injury risk
1A: 7	maintain current awareness of the pharmacological and nutritional agents used in the prevention of injury and return to play, including their effects, risks and status in relation to anti-doping regulations
1A: 8	identify specific assessment techniques and protocols used to establish performance profiles and potential injury risks, for example, functional and performance-related tests
1A: 9	identify available intervention strategies to minimise sport-specific injury risks <i>in different sporting contexts</i> , for example, safety equipment, taping, specific advice such as pacing
1A: 10	discuss the social significance of sports and exercise participation, and the impact of injury, in relation to the athlete and other individuals
1A: 11	discuss issues relating to compliance with advice and intervention strategies, including factors affecting motivation and adherence, and different coping strategies
1A: 12	identify risks for exercise addiction and overtraining and their effects on health and performance
B critique and synthesis	
The sports physiotherapist demonstrates the ability to:	
1B: 1	analyse the specific sports skills and sequences required by an athlete and develop appropriate field tests to estimate the athlete's response <i>in different sporting contexts</i>
1B: 2	critically analyse published research relating to principles of injury prevention, assessment techniques to evaluate an athlete's risk of injury, and intervention strategies used to minimise risk of injury
1B: 3	continually integrate new information and established principles of injury prevention
C information collection	
The sports physiotherapist demonstrates the ability to:	
1C: 1	elicit a subjective client history to identify any physical and psychological factors that suggest increased risk of injury
1C: 2	obtain and interpret information relating to the athlete's previous and current experiences of acute and chronic pain
1C: 3	conduct sport specific pre-participation evaluation using validated instruments to assess factors such as range of movement and control of sport specific movements, <i>in different sporting contexts</i>
1C: 4	develop and perform sport-specific functional tests to assess the athlete's potential risk of injury <i>in different sporting contexts</i>
1C: 5	communicate within a multidisciplinary context, obtaining further information from other professionals in relation to injury prevention

D information processing	
The sports physiotherapist demonstrates the ability to:	
1D: 1	use advanced knowledge of normal movement patterns and typical injury mechanisms to interpret the additional demands placed on the body <i>in different sporting contexts</i>
1D: 2	make individual and sport-specific professional judgments regarding injury risks <i>in different sporting contexts</i> – integrating the following information: <ul style="list-style-type: none"> • physical and psychological performance capacity¹, • the difference between load and ‘loadability’¹, • the influence of other factors such as pain and injury history, age, pre-existing or co-existing conditions, and functional limitations, • requirements of the specific sport or exercise, including the potential for overtraining injuries, • potential impacts of environments and equipment, and • ethical issues and awareness of a duty of care to the athlete
E action / intervention	
The sports physiotherapist demonstrates the ability to:	
1E: 1	use effective and respectful communication to provide education regarding injury risks and enhance motivation to comply with preventative strategies
1E: 2	develop appropriate intervention strategies to reduce the athlete’s risk of injury <i>in different sporting contexts</i> , such as: <ul style="list-style-type: none"> • physical conditioning, strengthening and endurance training, • factors affecting muscle control, • appropriate muscle stretching, • protective taping, bracing, or strapping, • thermal modalities, and • training to facilitate the development of greater efficiency in movement
1E: 3	provide effective training and education in injury-prevention strategies for athletes of all levels and abilities, other professionals and individuals
1E: 4	recognise scope of practice and the expertise of other professionals, leading to appropriate referral and communication of information
1E: 5	refer or advise athletes and other professionals appropriately in relation to the use of pharmacological and nutritional agents in the prevention of injury or in return to play
F evaluation and modification	
The sports physiotherapist demonstrates the ability to:	
1F: 1	evaluate the effectiveness of interventions to reduce the likelihood of injury, using appropriate assessment tools
1F: 2	accurately interpret measurement and evaluation findings, with awareness of their limitations, leading to a reasoned response (for example, modification of the intervention strategy)
G specific national standards	
1G: 1	

1: The physical capacity of the athlete to perform a sport or physical activity, relating to specific physiological, biomechanical, kinesiological and psychological demands

2

Acute Intervention

Sports physiotherapists respond appropriately to acute injury or illness in both training and competition contexts, using prior communication with other professionals to identify and establish roles and responsibilities

Context:

- acute intervention takes place at training and competition or event sites.

Behaviours:

- communication with all other medical and site personnel in order to identify and establish the different responsibilities and lines of communication in case of injury or illness.
- recognition of the signs and symptoms of acute injury or illness.
- observation and examination skills, selection of appropriate assessment techniques.
- diagnosis of the site and severity of injury and formation of rapid clinical judgements regarding:
 - the need for further immediate intervention (i.e. triage) and appropriate referral, or
 - the safety of continued participation in the activity under observation.
- appropriate evidence-based intervention where required, including:
 - basic life support and cardiopulmonary resuscitation,
 - appropriate immobilisation of the athlete to protect them from further injury or deterioration during transfer to the necessary medical facility, and
 - communication of relevant information to all members of the healthcare team.
- strategies are used to ensure that the athlete's right to privacy and confidentiality is protected in a variety of contexts, including intervention during a competition and in all communications with the media.

Specific National Interpretations –

Different countries or organisations may require specific qualifications relating to cardiopulmonary resuscitation and first responder skills; they may also have different regulations on the location of ultimate responsibility

Standards Relating to Competency 2: Acute Intervention	
A foundational knowledge	
The sports physiotherapist demonstrates the ability to:	
2A: 1	predict the effects of different types of acute injury and illness on normal body composition and functions, requiring knowledge of: anatomy, physiology, biomechanics, neurophysiology, pathophysiology and pathokinesiology
2A: 2	discuss the impact of environmental conditions on normal body functions and performance, for example, temperature and altitude changes
2A: 3	accurately describe signs and symptoms of acute injuries or illness and relevant examination strategies
2A: 4	apply systems for classifying the severity of different acute injuries and illness, for example: <ul style="list-style-type: none"> • the concussion injury classification scheme, • classification of heat and hydration conditions, and • classification of musculoskeletal injury
2A: 5	describe the specific qualifications relating to cardiopulmonary resuscitation and first responder skills relevant in countries and organisations relevant to the sports physiotherapist's practice
2A: 6	identify current best practice in response to specific acute injuries or illnesses and explain the scientific rationales for different strategies
2A: 7	describe current good practice in relation to blood hygiene, blood-borne pathogens, and health and safety practices and regulations
2A: 8	define individual and sport-specific return-to-play criteria following an illness or injury
2A: 9	differentiate between roles and responsibilities of other professionals, both nationally and internationally
B critique and synthesis	
The sports physiotherapist demonstrates the ability to:	
2B: 1	evaluate the research evidence for current best practice in responding to acute injury and illness in different sport and exercise contexts, including both assessment and intervention
C information collection	
The sports physiotherapist demonstrates the ability to:	
2C: 1	analyse normal and abnormal movement patterns associated with specific sports prior to a sport or exercise event <i>in different sporting contexts</i>
2C: 2	collect relevant information regarding the athlete's physical status, including physical condition and any co-existing conditions, prior to a sport or exercise event
2C: 3	rapidly recognise signs and symptoms of different forms of acute sports pathology, differentiating between: <ul style="list-style-type: none"> • musculoskeletal injuries, • neurological injuries, • internal injuries, and • acute illnesses
2C: 4	demonstrate a high level of acute evaluation and assessment of the athlete, including rapid identification and application of the most appropriate tests or evaluation techniques
2C: 5	apply strategies to rapidly assess the severity of acute pain or exacerbation of chronic pain

D information processing	
The sports physiotherapist demonstrates the ability to:	
2D: 1	<p>rapidly synthesise information to formulate an initial diagnosis of the type and severity of injury or illness <i>in different sporting contexts</i>, based on:</p> <ul style="list-style-type: none"> • assessment of signs and symptoms, • results of specific tests and evaluations, and • the athlete's previous physical status, <p>as applied to:</p> <ul style="list-style-type: none"> • musculoskeletal injuries (from sprains and strains to large joint dislocations and long bone fractures), • neurological trauma (from concussion to spine and peripheral nerve injury) , • acute systemic trauma (such as spleen rupture and kidney contusion), and • acute systemic illnesses (such as heat illness and dehydration)
2D: 2	<p>rapidly integrate information to formulate an appropriate individualised action plan, based on the assessment, initial diagnosis, and likely prognosis; further action may involve</p> <ul style="list-style-type: none"> • continuation of participation, • immobilisation and transportation to a medical facility, or • referral to other professionals
E action / intervention	
The sports physiotherapist demonstrates the ability to:	
2E: 1	regularly demonstrate competency in the ability to start life support in response to sudden death [see 2G: 1]
2E: 2	regularly achieve relevant qualifications in relation to competency in first aid and emergency sports response, safe spinal immobilisation, and secure transfer using a spinal board [see 2G: 1]
2E: 3	prepare for different contexts by ensuring that all equipment or supplies that may be required are available for use in the event of acute injury or illness in the clinic and at the training or competition site.
2E: 4	<p>participate in a multidisciplinary approach to planning, coordination and intervention, involving:</p> <ul style="list-style-type: none"> • prior communication with the athlete, other professionals and personnel, • negotiation of roles and responsibilities in training and competitive or demonstration contexts, and • recognition of unique emergency situations that require the ability to carry out autonomous decision making
2E: 5	<p>efficiently coordinate care in the acute sports emergency situation, to establish local processes and procedures for potential transfer of injured or ill athletes to medical facilities, including appropriate communication with:</p> <ul style="list-style-type: none"> • ambulance personnel, • emergency department personnel and sports physicians, and • site personnel and other professionals
2E: 6	act appropriately and safely on entry to the field in the event of injury or illness, observing any regulations or procedures
2E: 7	appropriately apply immobilisation and support techniques, using current evidence based techniques and equipment, for example, splinting, wrapping, taping, bandaging
2A: 8	locate information relating to specific regulations regarding the location of ultimate responsibility for first response in the event of injury or illness, whenever this is appropriate
2E: 9	incorporate health and safety recommendations into all actions, ensuring appropriate protection against blood-borne pathogens
2E: 10	adapt strategies to protect the athlete's right to privacy and confidentiality, for use in a variety of unpredictable settings
2E: 11	sensitively and appropriately communicate with the athlete, other professionals, personnel and significant others regarding further participation or clinical findings and the need for further medical attention
2E: 12	educate and advise the athlete and other individuals regarding signs and symptoms that indicate risk of deterioration if further medical attention is not immediately recommended

F evaluation and modification

The sports physiotherapist demonstrates the ability to:

2F: 1	recognise signs and perform tests necessary for continued monitoring of the athlete's condition, whether in transfer for further medical attention, recuperation, or return to play
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G specific national standards

2G: 1	<p>achieve the appropriate qualifications relating to acute response and care, renewed as regularly as required:</p> <p><u>Australia</u>: strongly recommend that sports physiotherapists complete Sports Medicine Australia Sports First Aid course and recertify every three years;</p> <p><u>Holland</u>: according to the Dutch re-registration criteria for sports physiotherapists;</p> <p><u>Italy</u>: first aid/emergency training is not mandatory for sports physiotherapists</p> <p><u>Portugal</u>: sports physiotherapists are not responsible for first aid;</p> <p><u>Switzerland</u>: first aid/emergency training are provided in general physiotherapy education;</p> <p><u>United Kingdom</u>: basic level - Basic life support and first aid certificate as required by the Association of Chartered Physiotherapists in Sports Medicine (recertification every two years); advanced level – sports trauma management or first responder certificate (recertification every year);</p> <p><u>United States</u>: American Heart Associate Healthcare Provider Basic Life Support (renewed every two years); American Red Cross First Responder Course (recertification every three years);</p> <p>note: for international professional practice, organisational and international requirements must be fulfilled.</p>
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3

Rehabilitation

Sports physiotherapists use clinical reasoning and therapeutic skills to assess and diagnose sports-related injuries, and to design, implement, evaluate and modify evidence-based interventions that aim for a safe return to the athlete's optimal level of performance in their specific sport or physical activity

Context:

- rehabilitation occurs from the point of physical activity or sports-related injury until the athlete returns to their optimal level of performance.
- rehabilitation occurs in individual or team contexts, within a multidisciplinary team and in a variety of locations, including private practice and training sites.

Behaviours:

- analysis of the injury and underlying processes, requiring specific knowledge of:
 - specific sports: frequently associated injuries, specific physical and psychological demands,
 - physical and psychological processes that occur during healing,
 - psychosocial influences in different athletic contexts,
 - influences of age and co-existing conditions or impairments
 - any concurrent interventions or investigations
- selection and implementation of appropriate assessments of the athlete's performance capacity¹, and efficiency of movement
- interpretation of information relating to any other previous, or concurrent, injury, illness or intervention.
- design and implementation of individual rehabilitation programs incorporating research-based, sport-specific rehabilitation strategies.
- measurement of intervention outcomes and appropriate modifications to practice.
- provision of advice regarding progress and appropriate timing of return to sporting and exercise activities.
- multidisciplinary communication to ensure the appropriate sharing of information and team approach, including referral where appropriate, and ensuring client confidentiality.
- estimation of risks involved in the independent use of equipment or strategies by the athlete or other individuals:
 - provision of guidance regarding situations where the knowledge and skills of the sports physiotherapist are required, and
 - where appropriate, education regarding the appropriate application of the equipment or strategies.
- communication with the athlete that reflects understanding of psychosocial influences on the rehabilitation process.

Specific National Interpretations –

1: The physical capacity of the athlete to perform a sport or physical activity, relating to specific physiological, biomechanical, kinesiological and psychological demands

Standards Relating to Competency 3: Rehabilitation	
A foundational knowledge	
The sports physiotherapist demonstrates the ability to:	
3A: 1	recognise sport-specific demands and their potential effects on healing and pain processes, <i>in different sporting contexts</i>
3A: 2	discuss the impact of co-existing and pre-existing pathologies on the rate and quality of tissue healing
3A: 3	identify the potential impacts of various factors on recovery, including: <ul style="list-style-type: none"> • co-existing and pre-existing conditions, • the experience of acute or chronic pain, • the effects of other medical interventions on different body systems, and • the impact of complications on recovery • psychological, social and cultural influences
3A: 3	show insight into the biopsychosocial impact of injury on athletes and other professionals <i>in different sporting contexts</i>
3A: 5	identify clinical and performance-related assessment techniques and protocols that are most appropriate <i>in different sporting contexts</i>
3A: 6	recognise the relevance of medical investigations and of information collected by other professionals in the multidisciplinary team
3A: 7	identify current intervention strategies used to promote early safe return to activity and progression to optimal function, including risks associated with their use
B critique and synthesis	
The sports physiotherapist demonstrates the ability to:	
3B: 1	critically analyse current research into measurement and intervention strategies used in rehabilitation and appropriately integrate new information into practice
C information collection	
The sports physiotherapist demonstrates the ability to:	
3C: 1	collect existing information relating to the athlete's condition, its severity, and implications for their daily life and sport or exercise participation
3C: 2	obtain a client history using reasoned selection of questions and sensitive communication <i>in different sporting contexts</i> ; the history should incorporate information relating to: <ul style="list-style-type: none"> • the client's priorities and goals • the specific sport or exercise activity and context, • psychosocial influences • co-existing and pre-existing conditions or treatments that might impact on diagnosis or intervention, and • other influences on performance, such as equipment and hydration or nutrition
3C: 3	assess the severity and duration of acute and chronic pain
3C: 4	observe and analyse specific sporting movements required by the athlete on return to participation <i>in different sporting contexts</i> , including <ul style="list-style-type: none"> • activities associated with the original injury, and • movements specific to a team role or position
3C: 5	select and apply the most appropriate clinical and performance-related tests to the individual, the injury, and the sport, <i>in different sporting contexts</i> (for example, tests of strength, functional performance, range of motion and flexibility)

D information processing	
The sports physiotherapist demonstrates the ability to:	
3D: 1	analyse the results of clinical and performance-related tests relative to sport-specific expectations
3D: 2	interpret assessment results to make a clinical diagnosis of developing or existing pathologies that are unrelated to the sport
3D: 3	reach a clinical diagnosis and devise a problem list that integrates information from a variety of sources: <ul style="list-style-type: none"> • a critical analysis of best practice, • the results of therapeutic evaluations, • information relating to any previous, or concurrent, injury, illnesses or interventions, • awareness of the psychosocial influences on the athlete, and • sport-, athlete-, and team-specific rehabilitation goals
3D: 4	integrate rehabilitation goals with foundational knowledge to devise an individual, research-based, sport-specific programme of intervention strategies
3D: 5	consider co-existing and pre-existing pathologies in rehabilitation planning, ensuring that strategies have a positive impact on the problems identified
3D: 6	make professional judgements regarding the appropriate times for progression of participation following illness or injury <i>in different sporting contexts</i>
E action / intervention	
The sports physiotherapist demonstrates the ability to:	
3E: 1	recognise and act on indications for urgent or non-urgent referral of an athlete for further investigations or intervention by other members of the multidisciplinary team (for example, MRI, ultrasound imaging, X-ray, surgery)
3E: 2	design and implement evidence-based conditioning, strengthening and stretching exercise programmes, specifically related to a specific individual, injury, and sporting role
3E: 3	design and implement individualised and evidence-based programmes to increase neuromuscular control, incorporating skill acquisition principles (for example, static, dynamic, reactive or preparatory techniques)
3E: 4	skilfully and appropriately carry out massage and manual therapy techniques <i>in different sporting contexts</i> , for example, for warm-up, recovery, and rehabilitation
3E: 5	use taping in an evidence-based strategy targeted at different treatment aims <i>in different sporting contexts</i> , for example, to promote rest, protection and facilitation of healing
3E: 6	use intervention strategies or appropriate referral to facilitate an athlete's coping with pain, and reduce its severity and duration where possible
3E: 7	sensitively communicate with the athlete to promote compliance with advice and rehabilitation, incorporating exercise psychology principles such as goal-setting, pacing and feedback
3E: 8	design training methods to maintain fitness and function of uninjured parts of the body during the recovery period, e.g. metabolic training, visual imaging techniques
3E: 9	estimate risks involved in the independent use of equipment or strategies by the athlete or other individuals: <ul style="list-style-type: none"> • provide guidance regarding situations where the knowledge and skills of the sports physiotherapist are required • educate individuals regarding the appropriate application of the equipment or strategies
3E: 10	sensitively advise the athlete and other professionals regarding progress and appropriate timing of return to sporting and exercise activities
3E: 11	sensitively educate the athlete and other individuals regarding principles of post-injury rehabilitation and prevention of re-injury to the athlete and other individuals
3E: 12	communicate effectively and respectfully in the multidisciplinary team, to ensure a coordinated and effective multidisciplinary approach in collaboration with the athlete
3E: 13	integrate strategies to ensure privacy and confidentiality for the athlete and sports team, in all communications

F evaluation and modification

The sports physiotherapist demonstrates the ability to:

3F: 1	modify the use of clinical and performance-related testing to provide the most appropriate information at different stages in the rehabilitation process (for example, progressing from tests of functional movements to complex field testing that relates directly to the sporting demands)
3F: 2	incorporate awareness of the principles of measurement reliability and validity into judgements relating to the interpretation of assessment data
3F: 3	make appropriate use of intervention outcomes: <ul style="list-style-type: none">• as biofeedback for the athlete and other professionals• to encourage compliance• to inform advice regarding participation and progression of training, and• to influence team decisions

G specific national standards

3G: 1

4

Performance Enhancement

Sports physiotherapists contribute to the enhancement of an athlete's performance by evaluating their physical and performance-related profile and advising or intervening to optimise conditions for maximal performance in a specific sport, within a multidisciplinary team approach

Context:

- provision of advice or intervention to individuals who request assistance to enhance their performance, rather than requiring rehabilitation following injury – supplementing the expertise of other members of the multidisciplinary team
- this varies in emphasis: internationally, at different competitive levels, and depending on the multidisciplinary context.

Behaviours:

- collection of information using questioning, observation and measurement, regarding different influences on performance, for example:
 - nutrition and hydration,
 - equipment and environment, and
 - the athlete's efficiency of movement and other physical functions in relation to demands of the sport or physical activity.
- critical evaluation and synthesis of information to form a profile of the athlete's current and potential performance.
- development of evidence-based strategies to influence factors with potential to safely and ethically increase performance, including therapeutic interventions where appropriate.
- sensitive communication of evidence-based recommendations to the athlete and others in the multidisciplinary team, upholding the athlete's right to privacy and confidentiality.
- use of outcome measures to evaluate the degree to which objectives have been achieved.

Specific National Interpretations –

Standards Relating to Competency 4: Performance Enhancement	
A foundational knowledge	
The sports physiotherapist demonstrates the ability to:	
4A: 1	analyse the anatomical, physiological, biomechanical requirements for optimal performance <i>in different sporting contexts</i>
4A: 2	interpret the influences of factors such as nutrition, supplements, hydration, equipment, ergogenic aids, and environmental conditions on the individual's capacity for optimal performance
4A: 3	show insight into psychosocial factors that might affect optimal performance
4A: 4	discuss intervention strategies and advice for safe optimisation of performance, based on current principles of exercise science, training and motor learning
4A: 5	identify the roles and responsibilities of all members of the multidisciplinary team in relation to performance enhancement, enabling a physiotherapy-specific contribution of knowledge and skills
B critique and synthesis	
The sports physiotherapist demonstrates the ability to:	
4B: 1	critically evaluate current research relating to maximal performance and strategies for its optimisation
C information collection	
The sports physiotherapist demonstrates the ability to:	
4C: 1	collect information from the athlete and other professionals in relation to different influences on performance, using questioning, observation and measurement
4C: 2	apply physiotherapeutic assessment techniques and performance-related tests to obtain information relating to the athlete's function and movement efficiency
D information processing	
The sports physiotherapist demonstrates the ability to:	
4D: 1	identify factors that are limiting the athlete in achieving optimal performance, by integrating the assessment findings with sport specific requirements <i>in different sporting contexts</i>
4D: 2	devise appropriate strategies for maximising performance while minimising injury risk, integrating sport-specific theoretical knowledge with evidence-based physiotherapeutic reasoning and skills
E action / intervention	
The sports physiotherapist demonstrates the ability to:	
4E: 1	provide physiotherapy-specific advice or intervention to individuals where assistance is requested to optimise performance in collaboration with the multidisciplinary team
4E: 2	safely and appropriately apply evidence-based strategies to improve performance, including therapeutic interventions
4E: 3	advise the athlete and other professionals regarding safe and evidence-based use of equipment and training strategies
4E: 4	Refer the athlete to appropriate members of the multidisciplinary team while maintaining their right to privacy and confidentiality
F evaluation and modification	
The sports physiotherapist demonstrates the ability to:	
4F: 1	continuously evaluate outcomes of performance enhancement programmes and implement appropriate modification, continuation, or discontinuation of the intervention
G specific national standards	
The sports physiotherapist demonstrates the ability to:	
4G: 1	

4.2 Advisor / Manager of the Patient/Client

The sports physiotherapist's role as Advisor is linked with their role as a Manager of the Patient/Client and relates to the provision of professional guidance, advice, and encouragement. This may occur in direct interactions with clients, or may be used to educate and influence practices or policy development at organisational, national and even international levels. The following competency has been designed to outline requirements of a sports physiotherapist in their advisory role:

5 Promotion of a Safe, Active Lifestyle

Note:

advice specific to the application or use of interventions and equipment is described as contributing to Competency 3: Rehabilitation.

5

Promotion of a Safe, Active Lifestyle

Sports physiotherapists collaborate with other professionals to promote safe participation in sports and activity for individuals of all abilities; they provide evidence-based advice regarding the optimal activity or sport for specific individuals and the ways in which they can minimise risk of injury and promote health

Context:

- advice and encouragement are given in direct interactions with individuals in any situation where the promotion of safe participation in physical activity is appropriate, and where guidance is sought directly.
- Influence is exerted at service delivery and policy development levels to advocate strategies and policies that promote safe participation in physical activity.

Behaviours:

- encouragement to live more actively is provided in any relevant context, where it is ethical to do so.
- specific advice is provided:
 - in relation to optimal activities for specific individuals and groups, requiring analysis of their current level of participation and any factors that might influence their enjoyment and safety,
 - to facilitate safe, enjoyable progression of participation, and
 - regarding the availability of relevant organisations and facilities.
- continual revision of advice to incorporate up-to-date research evidence and innovations.
- Integration of knowledge from several fields into advice given and communications strategies used, including:
 - optimal activities for different individuals and population groups,
 - health promotion principles,
 - understanding of behaviour change, and
 - physical, psychological and social influences on activity participation.
- promotion of adherence to sports-related laws, regulations, and principles of fair play

Specific National Interpretations –

This competency is strongly emphasised in Norway.

Standards Relating to Competency 5: Promotion of a Safe, Active Lifestyle	
A foundational knowledge	
The sports physiotherapist demonstrates the ability to:	
5A: 1	explore health promotion principles, including awareness of epidemiological trends in physical activity and exercise behaviours, guidelines for optimal participation, influences on participation, and behaviour change strategies.
5A: 2	analyse the physical and psychological benefits of different types of physical activity and exercise in specific individuals with varying needs, for example, of different genders, ages, and abilities
5A: 3	specify contraindications to specific types of movement and exercise that relate to specific individuals and population groups, such as individuals with chronic conditions
5A: 4	identify organisations and facilities which encourage and cater for specific types of sport and exercise for individuals of all ages and abilities
5A: 5	identify individuals and agencies that develop and influence policies and guidelines that affect the promotion of physical activity, exercise and sport
B critique and synthesis	
The sports physiotherapist demonstrates the ability to:	
5B: 1	critically analyse different types of physical activity and exercise measurement, enabling judgements of the credibility of epidemiological research
5B: 2	critically synthesise current research into physical activity and exercise behaviour change theories and intervention strategies
5B: 3	continually critique and synthesise research into the effects of movement and exercise on the physical and psychological health of specific population groups
C information collection	
The sports physiotherapist demonstrates the ability to:	
5C: 3	ask questions that relate to preference and personality, allowing suggestions about the most enjoyable types of activity for different individuals
5C: 1	collect relevant subjective and physical data to assess the individual's ability to participate in physical activity and exercise, identifying potential risks
5C: 2	determine an appropriate level of participation in physical activity or exercise, and identify any contraindication, using appropriate tests or referral to another professional
D information processing	
The sports physiotherapist demonstrates the ability to:	
5D: 1	analyse and estimate an individual's strengths, weaknesses, and preferences in relation to movement and physical activity
5D: 2	estimate safe and optimal progression of participation in different types of activity, integrating knowledge about the individual with consideration of exercise training principles
E action / intervention	
The sports physiotherapist demonstrates the ability to:	
5E: 1	provide effective advice and encouragement to promote safe and healthy participation in physical activity, exercise and sport
5E: 2	take actions that aim to influence the promotion of safe and healthy participation in physical activity, exercise and sport, at service delivery and policy development levels
F evaluation and modification	
The sports physiotherapist demonstrates the ability to:	
5F: 1	monitor an individual's participation, obtain feedback on motivation and adherence, and modify advice if required
G specific national standards	
5G: 1	

4.3 Professional Leader / Manager of the Patient/Client

In their role as Professional Leaders, sports physiotherapists are responsible for promoting excellence within their profession. Sports physiotherapists are responsible for shaping their own development as autonomous professionals, and developing the quality of their services. They are also in a position to influence the attitudes of athletes, the multidisciplinary team and other sports physiotherapists in relation to ethical and optimal interactions. Competencies 6 and 7 describe this role:

- 6 Life-Long Learning
- 7 Professionalism and Management

6

Life-Long Learning

Sports physiotherapists maintain and improve clinical standards by their critical, reflective and evidence-based approach to practice, and through a continual process of learning and teaching in collaboration with other professionals

Context:

- life-long learning is relevant to the individual practitioner in all their roles, and to their function within a multidisciplinary team, with the aim of ensuring quality of service provision.

Behaviours:

- ongoing development of knowledge and skills.
- critical analysis of practice and research evidence.
- ongoing reflection on practice, learning experiences, and communications with clients
- identification of learning needs, and the development of plans to address these needs that include:
 - independent and experiential learning,
 - mentoring, and
 - participation in accredited and non-accredited courses,
 - with critical reflection regarding the application of new learning to practice – demonstrating a master’s level of thinking in relation to all continuing professional development (see appendix 2).
- Involvement in the provision of opportunities for continuing professional development in a multidisciplinary context, including teaching and mentoring in structured and non-structured environments.

Specific National Interpretations –

Standards Relating to Competency 6: Life-Long Learning	
A foundational knowledge	
The sports physiotherapist demonstrates the ability to:	
6A: 1	discuss the importance of ongoing learning to ensure quality of service provision
6A: 2	differentiate the level to which learning should be developed and demonstrated at basic (undergraduate) and post-basic (Master's ¹) levels
6A: 3	identify a variety of mechanisms for professional development from different information media and networks
B critique and synthesis	
The sports physiotherapist demonstrates the ability to:	
6B: 1	critically analyse and synthesise new information gained through different learning environments and media
C information collection	
The sports physiotherapist demonstrates the ability to:	
6C: 1	collect information that allows ongoing evaluation of practice and evidence for knowledge and skill development, for example, peer evaluations, client views, audit and outcomes research
D information processing	
The sports physiotherapist demonstrates the ability to:	
6D: 1	appropriately integrate new information into decision-making processes, emphasising evidence-based practice
6D: 2	critically reflect on personal experiences and information collected in relation to practice, identifying strengths and areas for further development
6D: 3	formulate a learning action plan that identifies opportunities and strategies that will address professional learning needs
6D: 4	reflect on ways in which a contribution can be made to the learning of others, while contributing to personal professional development
E action / intervention	
The sports physiotherapist demonstrates the ability to:	
6E: 1	regularly respond to identified learning needs, for example, through: <ul style="list-style-type: none"> • the collection and analysis of information that fills gaps in professional knowledge, • locating opportunities for skill development, • independent and experiential learning, • mentoring, and • participation in accredited and non-accredited courses,
6E: 2	participate in the provision of opportunities for continuing professional development in a multidisciplinary context, including teaching and mentoring in structured and non-structured environments.
F evaluation and modification	
The sports physiotherapist demonstrates the ability to:	
6F: 1	critically reflect on the extent to which learning needs have been met, and the application of new learning to practice;
G specific national standards	
6G: 1	

1: Master's level: See appendix 2

7

Professionalism and Management

Sports physiotherapists manage time, resources and personnel in a professional, legal and ethical manner, and facilitate professional development and excellence

Context:

- sports physiotherapists work in a variety of settings, including private or government-funded practices, training and competition contexts, and in centres providing recreational exercise and sporting facilities.
- sports physiotherapists work with other professionals in their own and other fields, and frequently manage other personnel.

Behaviours:

- specific behaviours vary between service contexts and countries, but require knowledge and skills in:
 - time management,
 - the management of financial and other resources, including insurance procedures,
 - personnel management,
 - administration,
 - service organisation, monitoring, and strategic planning
 - legal issues relevant to different sports, physiotherapy, and service delivery
- prioritisation of ethical practices, equal opportunities, confidentiality and respect in the workplace.
- development of a working environment that encourages others to strive for excellence, providing and supporting opportunities for learning.

Specific National Interpretations –

Standards Relating to Competency 7: Professionalism and Management	
A foundational knowledge	
The sports physiotherapist demonstrates the ability to:	
7A: 1	identify legal issues, national and international professional standards relevant to sports physiotherapy and service delivery, including risk assessment procedures and health and safety regulations
7A: 2	outline the organisation of sports health care on national and international levels, including sport-specific legal and ethical regulations
7A: 3	specify general principles of resource management, demonstrating awareness of national and international insurance regulations and financial management
7A: 4	analyse the impact of human resource management principles and regulations on physiotherapy practice, including equal opportunities, data protection, confidentiality and respect in the workplace
7A: 5	show strategic awareness, including awareness of service organisation, monitoring and audit procedures, and marketing strategies
B critique and synthesis	
The sports physiotherapist demonstrates the ability to:	
7B: 1	synthesise current evidence for best practice in service delivery and resource management
C information collection	
The sports physiotherapist demonstrates the ability to:	
7C: 1	implement measures for the evaluation of service delivery and standards, including client satisfaction and treatment efficacy
D information processing	
The sports physiotherapist demonstrates the ability to:	
7D: 1	use monitoring and audit results to identify development needs, which may relate to personnel, environment, equipment, or strategic service delivery
E action / intervention	
The sports physiotherapist demonstrates the ability to:	
7E: 1	practice in a variety of unpredictable situations, for example: <ul style="list-style-type: none"> • transporting necessary equipment when travelling with the athlete(s), and • adapting measurement and intervention strategies for use in different environments (clinic, tour transportation, home, training, and competition)
7E: 2	develop a business plan that justifies the need for sports physiotherapy in a specific context, demonstrates financial planning, and includes marketing strategies
7E: 3	deliver safe services that operate within all national and professional rules and regulations and recognise the client's rights
7E: 4	write concise and informed reports for relevant competent authorities, such as insurance companies
7E: 5	demonstrate interpersonal skills that provide positive interactions with clients and co-workers
7E: 6	demonstrate professional leadership in the working environment by encouraging others to strive for excellence, and by providing and supporting opportunities for their learning
7E: 7	work effectively with other members of the multidisciplinary team with full awareness of their roles and responsibilities
F evaluation and modification	
The sports physiotherapist demonstrates the ability to:	
7F: 1	implement audit and monitoring systems that include regular reflection on the results, and mechanisms to ensure modification of practice as a result
G specific national standards	
7G: 1	ensure that relevant national and international recertification or registration requirements are fulfilled

4.4 Innovator / Manager of the Patient/Client

The sports physiotherapist is responsible for continuing to strive towards best practice. Continuing innovation is required in the pursuit of evidence based practice and the development of sports physiotherapy. The sports physiotherapist operates at a master's level and beyond, with the ability to source and critically review research findings, and to subsequently use new understanding to modify their practice. Sports physiotherapists progress further into involvement with the research process, individually or in collaborations. These activities are described in Competency 8:

8 Research Involvement

8

Research Involvement

Sports physiotherapists critically evaluate their practice in relation to new information, identifying questions for further study; they are involved in research that addresses these questions at different levels

Context:

- critical evaluation of practice and identification of questions for further study are relevant to the case manager and advisory roles of the sports physiotherapist in all working contexts.

Behaviours:

- continuous evaluation and development of measurement techniques, therapeutic interventions, optimal training practices, epidemiology of injury risk, and both environments and equipment associated with sports.
- level of research involvement will vary considerably, depending on context and career emphasis, from:
 - influencing the direction of research by the development and communication of research questions,
 - data collection,
 - participation in research collaborations working towards development of grant applications, and participation in multi-centre trials,
 - dissemination of findings through different media.

Specific National Interpretations –

Standards Relating to Competency 8: Research Involvement	
A foundational knowledge	
The sports physiotherapist demonstrates the ability to:	
8A: 1	discuss principles of quantitative and qualitative research design, including the characteristics of a rigorous and relevant research study
8A: 2	discuss the ethical and data protection issues involved in research and the analysis of client data
8A: 3	identify different methods for the analysis of quantitative and qualitative data and appropriate contexts for their use
8A: 4	identify opportunities for communicating potential study questions and new findings, including conferences, special interest groups, and research networks
B critique and synthesis	
The sports physiotherapist demonstrates the ability to:	
8B: 1	critique the design of previous research and explore solutions and developments that could improve the credibility of studies
8B: 2	critically analyse existing sports policies and relevant clinical guidelines
C information collection	
The sports physiotherapist demonstrates the ability to:	
8C: 1	participate in data collection at a variety of levels: this will vary from the evaluation of individual clinical practice to the collection of clinical data within a collaborative research project, or involvement as the principal investigator in a research study
8C: 2	develop and use appropriate systematic search strategies that incorporate a variety of electronic databases and other information sources
D information processing	
The sports physiotherapist demonstrates the ability to:	
8D: 1	analyse data relating to measurement and intervention efficacy at varying levels, including the evaluation of innovative practices to ensure ethical and effective practice
8D: 2	identify gaps in the evidence for practice following review of the quality and quantity of research studies and systematic reviews
E action / intervention	
The sports physiotherapist demonstrates the ability to:	
8E: 1	participate in the process of developing knowledge relating to assessment and measurement, interventions, and injury prevention; this will vary from the development and communication of research questions, to involvement in collaborations and leadership of research studies
F evaluation and modification	
The sports physiotherapist demonstrates the ability to:	
8F: 1	identify opportunities for progressing involvement in the research process
G specific national standards	
8G: 1	

4.5 Innovator / Professional Leader

The sports physiotherapist is involved in activities that aim to disseminate new information relating to best practice and innovative ways of working throughout their profession and beyond. This requires a dynamic attitude towards the promotion and development of sports physiotherapy and is described by Competency 9:

9 Dissemination of Best Practice

9

Dissemination of Best Practice

Sports physiotherapists disseminate new information and innovations to other professionals and decision-makers through different media

Context:

- relevant information is appropriately disseminated to other professionals – sports physiotherapists and others in the multidisciplinary team – at case management, service delivery, and policy development levels.
- dissemination occurs in team communications, special interest groups and networks, research collaborations, meetings, conferences, and through published material such as reports, promotional documents, newsletters, journals and the internet.

Behaviours:

- critical evaluation of new knowledge and innovations.
- written communication and information management skills to allow dissemination and discussion of information in formats suitable for a variety of media, such as the internet and journals.
- verbal communication skills applied during interactions with individuals and groups of different sizes.
- appropriate communication of new developments to decision-makers at different levels in related fields.

Specific National Interpretations –

Standards Relating to Competency 9: Dissemination of Best Practice	
A foundational knowledge	
The sports physiotherapist demonstrates the ability to:	
9A: 1	define evidence-based practice and best practice
9A: 3	discuss the potential of change management principles to ensure positive participation in processes of change, such as communication strategies
9A: 2	identify a wide variety of opportunities for dissemination and discussion of new information, and demonstrate awareness of the advantages and disadvantages of each type of forum
B critique and synthesis	
The sports physiotherapist demonstrates the ability to:	
9B: 1	critically evaluate the credibility of different media and sources used to obtain information that may influence practice
9B: 2	assess the value of new information in the context of sports physiotherapy practice and critically synthesise information from different sources, allowing decisions to be made in relation to practice
C information collection	
The sports physiotherapist demonstrates the ability to:	
9C: 1	access relevant sources of information including identification of a variety of sources of information that can inform the sports physiotherapist in relation to their practice, for example, literature databases
D information processing	
The sports physiotherapist demonstrates the ability to:	
9D: 1	develop a logically reasoned case relating to an element of practice or research, both for written and verbal presentation
E action / intervention	
The sports physiotherapist demonstrates the ability to:	
9E: 1	regularly participate in discussion of new information at local, national and international levels, which may include: <ul style="list-style-type: none"> • team communications, • special interest groups and networks, • participation in the development of sport-specific clinical guidelines • research collaborations and meetings, and • conferences
9E: 2	apply principles of change management to facilitate the development and implementation of best practice in sports physiotherapy
9E: 3	disseminate relevant information to professionals within sports physiotherapy, to others in the multidisciplinary team, and to decision-makers – at individual, service delivery, and policy development levels
9E: 4	communicate a reasoned and critical argument relating to principles of practice or research, using various media, such as: <ul style="list-style-type: none"> • verbal presentations to different audiences, and • written presentations (such as newsletters, websites and journals)
F evaluation and modification	
The sports physiotherapist demonstrates the ability to:	
9F: 1	reflect regularly on the experience of communicating information in a variety of contexts, resulting in continuous learning
9F: 2	modify written and spoken arguments (content, structure, language) for communication to audiences of different sizes and composition
G specific national standards	
9G: 1	

4.6 Innovator / Advisor

The sports physiotherapist advises athletes, other professionals, and the general public, as well as decision-makers in a variety of contexts. They are responsible for integrating new knowledge relating to sports physiotherapy into the advice given, thereby ensuring evidence-based-practice. This is described by Competency 10:

10 Extending Practice Through Innovation

10

Extending Practice Through Innovation

Sports physiotherapists promote the appropriate application of new knowledge and innovations in multidisciplinary practice and decision-making processes, and influence the directions of further research and innovation

Context:

- new knowledge and innovations are applied and integrated in the different patient/client management and advisory roles of the sports physiotherapist in multidisciplinary contexts.
- the promotion and influence of development occur at case manager, service delivery, and policy development levels.

Behaviours:

- ongoing access of continually updated sources of information relating to research and innovations in sports physiotherapy and related fields.
- promotion of recent and ongoing research and innovation, to ensure that awareness of developments extends within and beyond sports physiotherapy.
- critical evaluation and discussion relating to the potential for incorporating new developments into practice.
- incorporation of new knowledge and innovations into education in formal and informal learning experiences.
- Introduction of new knowledge and innovations into decision-making process, by informing individuals who are involved in the development of policies and guidelines that affect sports physiotherapy, sports issues, and the promotion of a safe, active lifestyle.
- influence of future directions for research and innovation through the generation of ideas and research questions that aim to develop best practice

Specific National Interpretations –

Standards Relating to Competency 10: Extending Practice Through Innovation	
A foundational knowledge The sports physiotherapist demonstrates the ability to:	
10A: 1	identify ethical and safety issues involved in developing new practice, including theoretical grounding, risk assessment, informed consent, and rigorous evaluation of new equipment and techniques
B critique and synthesis The sports physiotherapist demonstrates the ability to:	
10B: 1	stay up to date in relation to new innovations and evidence for their effectiveness, by accessing, critiquing and synthesising information from different sources
C information collection The sports physiotherapist demonstrates the ability to:	
10C: 1	implement measures to evaluate established and novel measurement techniques and interventions by carrying out appropriate: <ul style="list-style-type: none"> • calibration, • validity and reliability testing, • outcome studies of intervention strategies, and • audit of service delivery
D information processing The sports physiotherapist demonstrates the ability to:	
10D: 1	creatively identify problems and questions relating to practice through synthesis of <ul style="list-style-type: none"> • high quality research evidence, • local analysis of data collected to evaluate current practice, and • observations of practice
10D: 2	analyse scientific and clinical knowledge to provide a basis for the design of potential solutions to problems or questions
E action / intervention The sports physiotherapist demonstrates the ability to:	
10E: 1	participate regularly and dynamically in networks or discussions that allow the opportunities for discussing clinical questions or needs, and searching for and sharing potential solutions
10E: 2	influence others in decisions relating to priority areas for research and development
10D: 3	devise or modify assessment techniques to address specific testing requirements of the sport and its context
10E: 4	design and deliver creative interventions, based on scientific rationales and clinical reasoning, where traditional approaches have not been sufficient for the purpose
10E: 5	use sensitive and persuasive communication skills to motivate, encourage, inspire and lead others in the appropriate implementation of new practices, in a variety of contexts, including: <ul style="list-style-type: none"> • individual management of the patient/client within a multidisciplinary team, • service delivery, • education, and • policy development.
F evaluation and modification The sports physiotherapist demonstrates the ability to:	
10F: 1	make ethical decisions regarding the appropriate integration of new innovations into practice, requiring the analysis of clinical research evidence, ensuring that research evidence supports changes in clinical practice
G specific national standards	
10G: 1	

4.7 Professional Leader / Advisor

The sports physiotherapist influences the processes by which guidelines, policies and regulations are developed in the field of sports and physical activity. They communicate new regulations and guidelines to their colleagues, other professionals and athletes, using their influence to encourage adherence. Competency 11 describes this role:

- 11 Promotion of Fair Play and Anti-Doping Practices

11

Promotion of Fair Play and Anti-Doping Practices

Sports physiotherapists participate in and promote professional and ethical sporting practices, emphasising both fair play and their duty of care to the athlete; they adhere to the 'International Sports Physiotherapy Code of Conduct on Doping'

Context:

- fair play and anti-doping practices are relevant in all interactions with individuals who have a personal investment in optimal sporting performance, including athletes at all levels, other professionals, and relevant organisations.

Behaviours:

- awareness of all current legal and ethical policies and regulations that relate to sports activities and sports physiotherapy, including those associated with a particular sport or competition.
- promotion of ethical sporting practices in all their interactions, using knowledge and communication abilities to encourage adherence to policies and regulations, in the interests of safety and fair play.
- adherence to, and promotion of, anti-doping practices, as documented in the World Anti-Doping Code¹ and the 'International Code of Conduct On Doping'².
- awareness and regular consultation of the up-to-date Prohibited List of the World Anti-Doping Agency³.
- awareness of and adherence to anti-doping rules specific to any other sporting or professional authorities and organisations.
- cooperation with the processes of athlete drug testing programs.
- demonstration of a duty of care to the athlete: while the athlete is ultimately responsible for all substances entering their body¹, the sports physiotherapist has an attitude of responsibility to the athlete for not administering or recommending any prohibited substance, either intentionally or naively.

Specific National Interpretations –

1 World Anti-Doping Agency: WADA (2003a); 2 Frima, Dekker & Mitchell (2004); 3 World Anti-Doping Agency: WADA (2003b).

Standards Relating to Competency 11: Promotion of Fair Play and Anti-Doping Practices	
A foundational knowledge	
The sports physiotherapist demonstrates the ability to:	
11A: 1	differentiate between the rules and regulations of specific sports, organisations and competitions
11A: 2	specify pharmacological and nutritional agents used in injury prevention, rehabilitation and performance enhancement, including: <ul style="list-style-type: none"> • their physiological impacts, • potential adverse health effects and their signs and symptoms
11A: 3	specify current laws and regulations relating to doping, including: <ul style="list-style-type: none"> • the rights and responsibilities of the athlete and sports physiotherapist, and • doping control procedures, through consultation of the relevant documentation ^{1, 2, 3}
B critique and synthesis	
The sports physiotherapist demonstrates the ability to:	
11B: 1	synthesise foundational knowledge into a coherent work ethic that emphasises the promotion of healthy, ethical and legal sporting practices, and zero tolerance of the use of prohibited substances or violation of related rules and regulations
C information collection	
The sports physiotherapist demonstrates the ability to:	
11C: 1	regularly update knowledge in relation to sporting and anti-doping rules and regulations: <ul style="list-style-type: none"> • regular consultation of the up-to-date Prohibited List of the World Anti-Doping Agency³, • awareness of any planned testing procedures, and possible random testing
11C: 2	collect information relating to an athlete's use of medications for medical reasons, and consult the relevant authorities to ensure that this is not subject to penalty
11C: 3	regularly observe for physical and psychological changes in an athlete that might indicate use of banned substances
D information processing	
The sports physiotherapist demonstrates the ability to:	
11D: 1	maintain a duty of care to the athlete that incorporates: <ul style="list-style-type: none"> • awareness and evaluation of the pressures on an athlete and other professionals, and • an attitude of responsibility to the athlete for not administering or recommending any prohibited substance, either intentionally or naively
11D: 2	decide on appropriate referral where an issue is outside the sports physiotherapist's scope of practice
E action / intervention	
The sports physiotherapist demonstrates the ability to:	
11E: 1	effectively advise and educate athletes and other professionals in relation to safe and ethical sporting participation, including the promotion of, national and local anti-doping practices ^{1, 2, 3}
11E: 2	be a competent partner for the athlete in the anti-doping process, for example, through participation in testing, chaperoning, and administrative procedures
F evaluation and modification	
The sports physiotherapist demonstrates the ability to:	
11F: 1	reflect on the effects of advice and education provided in relation to safe and ethical sporting practices, and modify communication strategies where appropriate
G specific national standards	
11G: 1	

¹ World Anti-Doping Agency: WADA (2003a); ² Frima, Dekker & Mitchell (2004); ³ World Anti-Doping Agency: WADA (2003b).

Section 5: Future Directions in the Benchmarking Process

Together, the competencies and standards provide a description of the professional behaviours of a sports physiotherapist. They will be evaluated using an audit toolkit. Together, these form the framework for educational learning outcomes and a portfolio that serves several purposes:

- increasing the transparency of communication between sports physiotherapists and all individuals and agencies requiring their skills,
- guiding the design of professional development opportunities, and
- enabling sports physiotherapists to provide evidence of their competencies and identify their learning needs.

The Sports Physiotherapy for All website provides a public interface to facilitate communication between physiotherapists, employers, researchers, educators, and anyone with an interest in sports physiotherapy. It provides up-to-date sporting and professional information, a discussion forum, an educational portal, and literature resources.

Greater transparency in the description and demonstration of competencies allows promotion of sports physiotherapy, greater professional mobility, and guidance in career development, in Europe and beyond.

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World Health Organisation: Non-communicable Disease Prevention and Health Promotion (2003c) *Physical activity for various population groups* [online]. WHO. Available at: <http://www.who.int/hpr/physactiv/population.groups.shtml> [accessed 26/10/2004].

Glossary

Accreditation	A system used to acknowledge that professionals have met specified criteria for the achievement of defined competencies above described levels or standards; in some countries this involves registration ¹ – the International Federation of Sports Physiotherapists aims to achieve registration of all Sports Physiotherapists.
Advisors	International Sports Physiotherapy representatives who provide a global perspective in their review of draft documentation produced during the SPA Project.
Athlete	This document refers to athletes of all levels and abilities, so including those who participate in competitive and recreational sports, exercise and physical activity.
Attributes	A quality or property (Chambers Dictionary, 2003)
Audit Tool	A tool designed to enable the evaluation of sports physiotherapy standards.
Benchmark Statement	A description of the nature and characteristics of sports physiotherapy, defining the attributes and capabilities that an accredited sports physiotherapist should be able to demonstrate and representing the threshold standards to be achieved in each of these demonstrated competencies (Based on the definition of the QAA, 2001, in EU-WCPT, 2003a)
Competencies	Competency statements describe effective professional behaviours that integrate specific knowledge, skills and attitudes in a particular context (Dutch Ministry for Education, Culture and Science; Netherlands, 2002)
Consultant	An individual who delivers a specific piece of work that is necessary to a work package and cannot be delivered by either the work package team or the expert group.

Core Group	<p>The core group are responsible for delivering on all outputs of the SPA-Project, including the results and dissemination of results to the wider Physiotherapy community, ensuring that the project has the intended impact described in the project proposal. This group represents countries with well-developed systems and less well-developed systems, and is led by a Project Manager with overall responsibility for the process. Note: <u>Supporters of the Core Group</u> facilitate the delivery of outputs of the SPA-Project, including the results and dissemination of results to the wider Physiotherapy community, ensuring that the project has the intended impact described in the project proposal. <u>Employees</u> of the SPA Project are involved in work required for the delivery of work packages.</p>
Doping	<p>Doping is defined as the occurrence of one or more of the anti-doping rule violations set forth in the World Anti-Doping Code (Frima et. al, 2004; World Anti-Doping Agency: WADA, 2003a)</p>
Exercise	<p>Exercise is a physical activity that is planned, structured, repetitive and purposive in the sense that improvement or maintenance of one or more components of physical fitness is an objective.” (Caspersen et. al, 1985: p. 128)</p>
Expert Group	<p>The expert group is composed of representatives of Sports Physiotherapy employers and employees in the contexts of sports, leisure, recreation and education, from different European regions. Experts will provide guidance in the development of the Benchmark Statement, professional competencies and standards, their evaluation, and related educational portals. Note: Representatives from countries outside Europe may be invited to contribute as ‘External Experts,’ where the expert group can be enhanced by the input of individuals with international expertise who participate on a self-funding basis.</p>
Learning Outcomes	<p>Explicit statements of learning intent that can be evaluated for the degree to which they have been achieved (based on description from Quality Assurance Agency: Jackson, 2001)</p>
Loadability	<p>The physical capacity of the athlete to bear load, integrating anatomical, physiological, and biomechanical capacity</p>

Performance Capacity	The physical capacity of the athlete to perform a sport or physical activity, relating to specific physiological, biomechanical, kinesiological and psychological demands
Physical Activity	“Any bodily movement produced by skeletal muscles that results in energy expenditure” (Caspersen et. al, 1985: p. 126)
Physiotherapy	“Nature and extent of physiotherapy: Physiotherapists operate as independent practitioners as well as members of health care teams, and are subject to ethical principles of the World Confederation for Physical Therapy. They are able to act as first contact practitioners, and patients may seek direct care without referral from another health care professional. Professional education prepares physiotherapists to be autonomous practitioners. Clinical diagnosis in physiotherapy is the result of a process of clinical reasoning which results in the identification of existing or potential impairments, functional limitations, and abilities/disabilities that will direct physiotherapy interventions. Legislation in each European country will determine the finite rules of practice, and the authority/insurance financing the physiotherapy service may require specific procedures of referral. Physiotherapists provide a substantial teaching and advisory role to the public and many patient and client groups. The qualified physiotherapist also provides mentorship for students and colleagues and therefore utilises a range of communication and teaching skills. A challenging aspect of physiotherapy is the broad scope of practice in terms of patient and client groups, health care delivery settings, and intervention for problems concerning body functions and structures, activity and participation. The World Confederation for Physical Therapy recognises the diverse social, political and economic environments in which physiotherapy is practised throughout the world. The European Region of WCPT has adopted European Core Standards of Physiotherapy Practice, but specific national standards for physiotherapy practice will reflect the situation in each country. Physiotherapy practice makes direct reference to published research evidence, as well as indicators of effective intervention in the form of professional and clinical standards and clinical guidelines. Practice is informed by physiotherapy-specific research as well as the general scientific literature, and in this way engages in evidence-based practice.” (ER-WCPT, 2003)

Registration	A system used to register all professionals who have met specified criteria for the achievement of defined competencies above described levels or standards – the International Federation of Sports Physiotherapists aims to achieve registration of all Sports Physiotherapists.
Specialisation	Concentration of work or interest on a particular subject or clinical area, associated with the development of specific knowledge, skills and attitudes (Adapted from: The Chambers Dictionary, 1993)
Sports	Recreation, pastimes, play, games or activities involving physical exercise (Adapted from: The Chambers Dictionary, 1993)
Sports Injury	Sports injuries are “a series of undesired events occurring in the interplay between individuals and environment during physical activity, competitive or recreational, resulting in physical impairment or ailment, because the human body or part of it was subjected to force(s) exceeding the threshold of physical endurance. The result of an injury is the alteration, limitation or termination of participation of an athlete in the respective activity for at least one day. Notable severity of an injury is considered one that shall have a physical effect lasting at least one week.” (Petridou, 2001)
Standards	Minimum threshold levels of performance in relation to competencies that will ensure a professional has achieved the expected level of ability to meet the description of sports physiotherapist (based on Donaghy & Lopes, 2003)

Appendices

Appendix 1: A Summary of the Institutions and Individuals Who Participated in the Sports Physiotherapy for All Project and Their Roles

Individual	Institution
Core Group: The core group are responsible for delivering on all outputs of the SPA-Project, including the results and dissemination of results to the wider Physiotherapy community, ensuring that the project has the intended impact described in the project proposal. This group represents countries with well-developed systems and less well-developed systems, and is led by a Project Manager with overall responsibility for the process.	
Ms Brigitte van Barneveld	Hogeschool van Utrecht, The Netherlands
Dr Jan Cabri	The Faculdade de Motricidade Humana, Technical University of Lisbon; Portugal
Ms Laetitia Dekker	International Federation of Sports Physiotherapy, The Netherlands
Dr Marie Donaghy	Queen Margaret University College, UK
Ms Romyana Tasheva	National Sports Academy, 'Vassil Levski,' Sofia, Bulgaria
Mr Gianni Viardo Vercelli	Facolta di Scienze della Formazione, Universita degli Studi di Genova; Italy
Core Group Supporters: Supporters of the Core Group facilitate the delivery of outputs of the SPA-Project, including the results and dissemination of results to the wider Physiotherapy community, ensuring that the project has the intended impact described in the project proposal.	
Dr Giovanni Adorni	Facolta di Scienze della Formazione, Universita degli Studi di Genova; Italy
Mr Marco Barbero	Facolta di Scienze della Formazione, Universita degli Studi di Genova; Italy
Dr Virginia Cano	Queen Margaret University College, UK
Dr Daniela Dasheva	National Sports Academy, 'Vassil Levski,' Sofia, Bulgaria
Ms Diane McGill	Queen Margaret University College, UK
SPA Project Staff: Employees of the SPA Project, involved in work required for the delivery of work packages.	
Ms Margaret Brown	Queen Margaret University College; UK
Dr Cathy Bulley	Queen Margaret University College; UK
Mr José Esteves	The Faculdade de Motricidade Humana, Technical University of Lisbon; Portugal
Ms Catriona Rasdale	Queen Margaret University College; UK
Mr Adriaan Mellema	Hogeschool van Utrecht, The Netherlands

Expert Group:	
The expert group is composed of representatives of Sports Physiotherapy employers and employees in the contexts of sports, leisure, recreation and education, from different European regions. Experts will provide guidance in the development of the Benchmark Statement, professional competencies and standards, their evaluation, and related educational portals. Note: Representatives from countries outside Europe may be invited to contribute as 'External Experts,' where the expert group can be enhanced by the input of individuals with international expertise who participate on a self-funding basis.	
Mr Mario Bizzini	Sports physiotherapist, researcher; Switzerland
Mr Robert van Cingel	Dutch Olympic Committee & Dutch Sports Confederation
Mr Mark DeCarlo	Methodist Sports Medicine Center, Indianapolis, USA
Mr Margaret Grant	Australian Council of Physiotherapy Regulating Authorities; Australia
Dr Romain Meeusen	Vrije Universiteit Brussel, Brussels; Belgium
Dr Nicola Phillips	Cardiff University; UK
Ms May Arna Risberg	Sports physiotherapist and academic; Norway
Advisors:	
International Sports Physiotherapy representatives who provide a global perspective in their review of draft documentation produced during the SPA Project.	
Dr Rob de Bie	Maastricht University, the Netherlands
Ms Tracy Bury	World Confederation for Physical Therapy (WCPT)
Mr Kosio Ganchev	Bulgarian Organization of Sports Physiotherapy
Ms Jetske Goudswaard	Huisartsenpraktijk Wernaar (Physiotherapy, Sports Physiotherapy and Manual Therapy Practice, Netherlands)
Dr Wim Hullege	Executive Board Member, NVFS, Netherlands
Ms Brenda Myers	World Confederation for Physical Therapy (WCPT)
Ms Daniela de Oliveira Marreiros Rolf	Nederlandse Vereniging voor Fysiotherapie in de Sportgezondheidszorg, (NVFS), the Netherlands
Ms Gisela Sole	School of Physiotherapy, University of Otago, New Zealand
Mr Marco Testa	Faculty of Medicine and Surgery, University of Genoa, Italy
Mr Roger op het Veld	NVFS, Netherlands
Mr Guy Zito	School of Physiotherapy, University of Melbourne, Australia
Consultants:	
An individual who delivers a specific piece of work that is necessary to a work package and cannot be delivered by either the work package team or the expert group. <i>Note: only the consultant who contributed to the development of sports physiotherapy competencies and standards is listed here</i>	
Mr Remco Coppoolse	Hogeschool van Utrecht, The Netherlands

Appendix 2: A Description of Master's Level:
 Extract From "An Introduction to the Scottish Credit and
 Qualifications Framework: 2nd Edition:" SCQF Level 11 (p. 36)

NB These descriptors set out the characteristic generic outcomes of each level. They are intended to provide a general, shared understanding of each level and to allow broad comparisons to be made between qualifications and learning at different levels. They are not intended to give precise or comprehensive statements, and there is not expectation that every qualification or programme should have all the characteristics. The descriptors have been developed through a series of consultations and are offered as a first working guide which will be revised in the light of feedback on their use.

Knowledge and understanding	Practice: Applied knowledge and understanding	Generic cognitive skills	Communication, ICT and numeracy skills	Autonomy, accountability and working with others
Characteristic outcomes of learning at each level include the ability to:				
Demonstrate and/or work with: <ul style="list-style-type: none"> • <i>knowledge that covers and integrates most, if not all, of the main areas of a subject/discipline – including their features, boundaries, terminology and conventions</i> • <i>a critical understanding of the principal theories, principles and concepts</i> • <i>a critical understanding of a range of specialised theories, principles and concepts</i> • <i>extensive, detailed and critical knowledge and understanding in one or more specialisms, much of which is at or informed by developments at the forefront</i> • <i>critical awareness of current issues in a subject/discipline and one or more specialisms</i> 	Use a significant range of the principal skills, techniques, practices and/or materials that are associated with a subject/discipline. Use a range of specialised skills, techniques, practices and/or materials which are at the forefront or informed by forefront developments. Apply a range of standard and specialised research or equivalent instruments and techniques of inquiry. Plan and execute a significant project of research, investigation or development. Demonstrate originality or creativity in the application of knowledge, understanding and/or practices. Practise in a wide and often unpredictable variety of professional level contexts.	Apply critical analysis, evaluation and synthesis to issues which are at the forefront or informed by developments at the forefront of a subject/discipline. Identify, conceptualise and define new and abstract problems and issues. Develop original and creative responses to problems and issues. Critically review, consolidate and extend knowledge, skills practices and thinking in subject/discipline. Deal with complex issues and make informed judgements in situations in the absence of complete or consistent data/information.	Use a range of advanced and specialised skills as appropriate to a subject/discipline - for example: <ul style="list-style-type: none"> • <i>communicate, using appropriate methods, to a range of audiences with different levels of knowledge/expertise</i> • <i>communicate with peers, more senior colleagues and specialists</i> • <i>use a wide range of software to support and enhance work at this level and specify new software or refinements/improvements to existing software to increase effectiveness</i> • <i>undertake critical evaluations of a wide range of numerical and graphical data</i> 	Exercise substantial autonomy and initiative in professional and equivalent activities. Take responsibility for own work and/or significant responsibility for the work of others. Take responsibility for a significant range of resources. Demonstrate leadership and/or initiative and make an identifiable contribution to change and development. Practise in ways which draw on critical reflection on own and others' roles and responsibilities. Deal with complex ethical and professional issues and make informed judgements on issues not addressed by current professional and/or ethical codes or practices.

Appendix 3: Summary of Documentation Analysed to Inform the Selection of Competencies

Country	Sports Physiotherapy Organisation	Documents Received
Australia	Sports Physiotherapy Australia	Signed memorandum of understanding relating to the following documents developed by the Australian Physiotherapy Association: The APA Sports Physiotherapy Professional Practice Standards; The APA Charter of Educational Standards; The APA Professional Development Scheme; The APA Specialisation. Course documents and module descriptors have been obtained from all Sports Physiotherapy courses which make them available on the internet
Austria	Sportphysiotherapie Team Austria	Guidelines of the Austrian Sports Physiotherapy group: working fields in sports physiotherapy, aims of education, minimum standard Curriculum requirements;
Bulgaria	Bulgarian Organization of Sports Physiotherapy (BOSP)	Masters program in Physiotherapy/Kinesitherapy outline; Masters program in Sports Physiotherapy outline; requirements for acquiring the position of Physiotherapist; requirements for the post of Physiotherapist in Rehabilitation and Sports Medicine (Hospital-based); requirements for the post of Rehabilitation-Masseur in Rehabilitation and Sports Medicine (Hospital Based)
Denmark	Faggruppen for IdrætsFysioterapi (Danish Society of Sports Physiotherapy)	No documentation currently available
Germany	Arbeitsgemeinschaft Sportmedizin im Deutschen Verband für Physiotherapie	Program of further training in physiotherapy: Sports Physiotherapist of the ZFK
Hungary	Hungarian Sports Physiotherapy Group	No documentation currently available
Ireland	Chartered Physiotherapists in Sports Medicine (CPSM)	Guidelines that describe the practice of sports physiotherapists; Documentation that describes the attributes and competencies required of sports physiotherapists; Standards for sports physiotherapists; Information from postgraduate programmes of sports physiotherapy
Italy	Gruppo Interesse Specialistico Sport A.I.FI. (GIS SPORT A.I.FI.)	No documentation currently available
Netherlands	Nederlandse Vereniging voor Fysiotherapie in de Sportgezondheidszorg (NVFS)	Dutch Occupational Competencies Profile of Sports Physiotherapists; learning outcomes of the Dutch Sports Physiotherapy educational programme, Hogeschool van Utrecht; general learning outcomes at undergraduate and master's level
New Zealand	New Zealand Sports and Orthopaedic	Learning outcomes for papers in the postgraduate program relevant to sports physiotherapy

Norway	Norwegian Sports Physical Therapy Association	Guidelines for practice, details of 2 educational programmes
Spain	Seccion National de Fisioterapia Deportiva	Documentation sent, but lost in transit
Switzerland	Swiss Sports Physiotherapy Association (SSPA)	A list of 3 non-accredited sports physiotherapy educational programmes in Switzerland was provided: all were contacted to request more information, one replied: European Education to Excellence: Postgraduate Sports Physiotherapy Programme – philosophy, objectives, resources, partners, syllabus
Turkey	Association of Turkish Sports Physiotherapists	Guidelines describing practice; Educational programme outlines: BSc, 2 MSc programmes and 2 PhD programmes
United Kingdom	Association of Chartered Physiotherapists in Sports Medicine (ACPSM)	ACPSM: A Proposal for Continuous Professional Development; sports physiotherapy-specific comments for inclusion in the Chartered Society of Physiotherapy standards of practice; Cardiff University Master's in Sports Physiotherapy – course-related documentation obtained through the web
United States of America	Sports Physical Therapy Section (SPTS)	Minimum eligibility requirements for Physical Therapy Specialist Certification; Sports Description of Physical Therapy Practice – DRAFT (not for distribution)

Appendix 4: Summary of Themes Contributing to Each Competency and Their Location in the Competency Model

Competency	Contributing Themes
Model Area: Manager of the Patient/Client	
<p>Four competencies with overlap in the themes:</p> <ol style="list-style-type: none"> 1 Injury prevention 2 Acute intervention 3 Rehabilitation 4 Performance enhancement 	<ul style="list-style-type: none"> • knowledge and understanding of physiology, anatomy, biomechanics, neuroanatomy and neurophysiology in relation to sports and exercise • knowledge and understanding of sports, exercise and trauma-related aetiologies, pathologies, epidemiology • sports-science knowledge: training principles, applications relating to different sports • assessment in the emergency/acute setting, • communication relating to the delineation of multidisciplinary roles and procedures in the emergency/acute setting • collection and analysis of a patient history and data relating to physical function and movement: specific performance, functional and anthropometric testing • ability to interpret imaging and diagnostic tests in consultation with other multidisciplinary team members • clinical reasoning and treatment planning • early responder and basic life support skills • knowledge of treatment indications; contraindications associated with trauma and with medical and surgical interventions • understanding of the current research evidence relating to mechanisms, applications, limitations and contraindications of different techniques for data collection and for treatment • application of techniques, for example, stretching, strapping, taping, bracing, manual therapy, sports massage, electrotherapy, exercise prescription/program design, neuromuscular control, emergency care • knowledge and ability to advise the athlete or other professionals/carers about continuing a treatment and/or training programme on an independent basis where appropriate; includes knowledge relevant to the evaluation of sports equipment and aids, ability to train other individuals in the use of prostheses and correction devices, and - ability to advise other individuals in the application and use of taping, bandaging, bracing and immobilisation techniques, heat/electrical modalities, etc. • relevant knowledge and ability to advise the athlete and other professionals about nutrition • knowledge and understanding of psychological theories, awareness of sports psychology and psychological approaches, indications and possibilities for referral and ability to advise the athlete and other professionals accordingly • treatment evaluation and modification • knowledge and understanding of health and injury status, healing processes and timescales; ability to advise regarding phases of return to sport, limits for participation in an activity while injured • recognition of scope of practice, referral where appropriate • strategies to ensure privacy and confidentiality in a variety of sporting and athletic contexts • cultural awareness and sensitivity • understanding of the significance of participation <p>N.B. in relation to distinct groups, e.g. age, gender, abilities</p>

Competency	Contributing Themes
Model Area: Advisor/Manager of the Patient/Client	
5 Promotion of a safe, active lifestyle	<ul style="list-style-type: none"> • advice to the general public and other professionals about developing a safe and healthy active lifestyle and about sports-related activities. Requiring: <ul style="list-style-type: none"> - knowledge about the benefits of activity - knowledge about disease epidemiology - knowledge about health promotion - knowledge about the relative advantages and disadvantages of different sports and activities for different individuals and population groups • knowledge of national and international policies and organisations relating to specific population sub-groups • awareness of health and safety-related policies and legislation
Model Area: Professional Leader/Manager of the Patient/Client	
6 Life long learning	<ul style="list-style-type: none"> • education, mentoring and training of other professionals – sports physiotherapists and the multidisciplinary team • involvement in personal Continuing Professional Development in a variety of formats and environments, e.g. structured, non-structured, university- and non-university-based • theory and methods relating to educational and interpersonal communication and learning
7 Professionalism and management	<ul style="list-style-type: none"> • awareness of national and global Sports Physiotherapy issues • awareness of legal aspects of Sports Physiotherapy practice: related policies and legislation and scope of practice, including professional standards and regulations at local, national and international levels • ability to manage other professionals where applicable and to ensure optimal working within the multidisciplinary team • ability to manage the financial and marketing aspects of Sports Physiotherapy practice • knowledge and management of insurance-related aspects of Sports Physiotherapy practice • ensuring the implementation of infection control and risk assessment procedures
Model Area: Innovator/Manager of the Patient/Client	
8 Research Involvement	<ul style="list-style-type: none"> • Use of information resources, literature searching • Critical evaluation of literature: application of knowledge and understanding of research methods • Development of research questions • Study design and implementation: knowledge and understanding of research methods • Assessment of client satisfaction and needs analysis for groups • Application of research to practice: ongoing modification of practice based on current evidence • Ongoing evaluation of intervention as a Case Manager

Competency	Contributing Themes
Model Area: Innovator/Professional Leader/Manager of the Patient/Client	
9 Dissemination of best practice	<ul style="list-style-type: none"> • Evidence of participation in conferences and meetings • Dissemination of current research – e.g. presentation at meetings and conferences, publication of articles
Model Area: Innovator/Advisor/Manager of the Patient/Client	
10 Extending practice through innovation	<ul style="list-style-type: none"> • Critical analysis and synthesis of current evidence and dissemination in advice given to other professionals and to athletes • Knowledge of current developments in equipment and materials and integration into advice given to other professionals and to athletes • Involvement in networks and collaborations for the purposes of developing knowledge and good practice
Model Area: Professional Leader/Advisor/Manager of the Patient/Client	
11 Promotion of fair play and anti-doping practices	<ul style="list-style-type: none"> • awareness of sports-related regulations, policies and legislation • knowledge and ability to advise the athlete and other professionals in relation to the rules of the sport/competition/agency • knowledge of the sport-specific ethical issues, including doping and adherence to regulations; encouraging fair play • knowledge of international doping policies and ensuring their implementation in the multidisciplinary team through education • relevant knowledge and ability to advise the athlete and other professionals about doping and drug testing procedures • knowledge and understanding of the psychosocial issues relating to sports participation, including the tensions between sporting interests and the duty of care of the health professional

Acknowledgements:

We would like to thank the National Agency Leonardo da Vinci Netherlands, for funding the SPA Project, as well as Core Group Supporters and Staff:

Core Group Supporters

Giovanni Adorni	Facolta di Scienze della Formazione, Universita degli Studi di Genova; Italy
Marco Barbero	Facolta di Scienze della Formazione, Universita degli Studi di Genova; Italy
Virginia Cano	Queen Margaret University College; UK
Daniela Dasheva	National Sports Academy, 'Vassil Levski,' Sofia Bulgaria
Diane McGill	Queen Margaret University College; UK

Core Group Staff

Margaret Brown	Queen Margaret University College; UK
Cathy Bulley	Queen Margaret University College; UK
Jose Esteves	The Faculdade de Motricidade Humana, Technical University of Lisbon; Portugal
Catriona Rasdale	Queen Margaret University College; UK
Adriaan Mellema	Hogeschool van Utrecht; The Netherlands

Thank you to all contributors during the consultation period and to all individuals who contributed information from the following organisations:

Sources of International Documentation

Sports Physiotherapy Australia
Sportphysiotherapie Team Austria
Bulgarian Organization of Sports Physiotherapy (BOSP)
Faggrupper for IdrætsFysioterapi (Danish Society of Sports Physiotherapy)
Arbeitsgemeinschaft Sportmedizin im Deutschen Verband für Physiotherapie
Hungarian Sports Physiotherapy Group
Chartered Physiotherapists in Sports Medicine (CPSM)
Gruppo Interesse Specialistico Sport A.I.FI. (GIS SPORT A.I.FI.)
Nederlandse Vereniging voor Fysiotherapie in de Sportgezondheidszorg (NVFS)
New Zealand Sports and Orthopaedic
Norwegian Sports Physical Therapy Association
Seccion Nacional de Fisioterapia Deportiva
Swiss Sports Physiotherapy Association (SSPA)
Association of Turkish Sports Physiotherapists
Association of Chartered Physiotherapists in Sports Medicine (ACPSM)
Sports Physical Therapy Section (SPTS)