# Physiotherapy Career Pathway



White Paper–May 2016





### Introduction

Entry to the discipline of Physiotherapy is available to persons who meet the requirements for initial registration with the Physiotherapy Board of Australia. Ongoing registration is dependent, amongst other things, on the individual's maintenance of competence via mandatory continuing professional development. The current registration standard (Physiotherapy Board of Australia, 2015a) requires that registered physiotherapists:

- complete a minimum of 20 hours of CPD annually,
- maintain a CPD portfolio
- participate in activities that contribute to maintaining and improving competence

The Australian Physiotherapy Association (APA) seeks to promote quality health care in the community, by taking an active part in supporting its members various roles through contemporary and accountable professional development. The APA will provide a transparent career pathway that will be flexible and agile to accommodate member needs, whilst being demonstrable in the level of achievement.

The APA Career Pathway is a framework of quality-assured coursework, mentoring and research with clearly defined optional assessment points. This framework joins the universities, the APA and commercial professional development companies to share standards, competencies and learning outcomes at each step of a physiotherapists' career. By doing this, physiotherapists have greater choice on where, when and how they would like to access their learning. Physiotherapists should be able to undertake a coursework master's, or join university modules and APA coursework together towards titling and create their own pathway.

The Australian Physiotherapy Association (APA) is a significant provider of continuing professional development (CPD) for physiotherapists in Australia. APA CPD programs have evolved across time, cover most areas of physiotherapy practice and are diverse in the type of educational activity and mode of delivery. The provision of CPD is, for the greater part, designed and delivered by members of National Groups. The volunteer base of the APA has responded to the educational needs of members and has driven the establishment of the various lectures and programs on offer.

It is now time for the APA to innovate, to build on its existing CPD foundations and enhance the educational quality of its programs for the benefit of members. The APA is uniquely placed to develop an integrated learning pathway that will enable recognition of progressive competence development along a learning continuum. Acknowledging the learning outcomes of higher education courses of study, the APA will provide targeted education to meet the needs of the profession across areas of practice and individuals' career stages.

This project involves harmonising the currently disparate elements and processes of physiotherapyrelevant education and CPD into a Physiotherapy Career Pathway, which is supported by an educational framework that will ensure the quality of offerings and the achievement of explicit learning outcomes. This White Paper outlines the early thinking around the Career Pathway, informed by initial discussions at the level of the Board and the National Advisory Council. As the work progresses there will be ample opportunity for member input, primarily via national group and branch structures.

APA Strategic Plan 2015-2017: Extract strategic objectives

#### Quality

"The APA will provide members with access to the highest quality knowledge, resources and research that keeps members' skills current and relevant. We will remain the organisation of choice for quality professional development products and services"

#### Capability

"The APA will continually evolve to build the success and sustainability of the profession. We will create and maintain a compelling member value proposition that is contemporary, relevant and scalable."

#### The physiotherapy workforce

In September 2015 there were 26,601 physiotherapists registered in the general category (Physiotherapy Board of Australia, 2015b). Data from 2012 (Health Workforce Australia, 2014) indicates that of registered persons employed in physiotherapy 89.5% are clinicians, 4.2% administrators, 2.8% teachers or educators, 1.5% researchers and 1.9% other. Table 1 shows the percentage of employed clinical practitioners by primary area of practice and indicates the approximate size of the potential CPD market in these areas of practice.

Table 1: Physiotherapists' primary area of practice in 2012				
Primary area of practice	Per cent			
Musculoskeletal	53%			
Aged Care	14%			
Neurological	7%			
Cardiorespiratory	7%			
Paediatrics	6%			
Sports	3%			
Women's Health	2%			
Other	5%			
Not stated or inadequately described	3%			
Source: Health Markforce Australia (2014)				

Source: Health Workforce Australia (2014)

The HWA report identified only two workforce issues: "difficulties filling positions in rural and remote areas, and a shortage of more experienced and specialised physiotherapists" (Health Workforce Australia, 2014, p.42). Other issues identified in the report (p.35) were:

- A high attrition rate at an early career stage
- Increased need for specialisation and evolution of extended scope roles

#### A Physiotherapy Career Pathway

The Physiotherapy Career Pathway does not assume that all physiotherapists will take a linear career trajectory in a single area of practice to titling and specialisation. While the Career Pathway will retain titling and specialisation as sentinel points on the pathway, it will accommodate diverse career pathways which recognise that some practitioners will develop breadth across two or more areas of practice, or move from one area to another. The space between entry-level and titling is anticipated as being the largest area of activity, as numbers of practitioners wishing to pursue formal titling will be a subset of members, and a smaller number again will seek specialisation.

The aims of the career pathway are to:

- support individuals' career goals
- accommodate the diversity of educational needs of physiotherapists
- support the workforce mobility of physiotherapists nationally and internationally
- support life-long learning
- respond to changes in physiotherapy practice
- develop and retain experienced and specialised physiotherapists in the workforce
- facilitate advocacy for physiotherapists

The principles of the career pathway are:

- Transparent and rigorous quality processes
- Industry recognised standards
- Learning outcomes aligned with Physiotherapy competence standards
- Alignment with the Australian Qualifications Framework
- Flexible and inclusive learning processes

For the purpose of this paper the term *competence* means a characteristic of the practitioner that can be located on a continuum of performance with four levels: Novice, Competent, Proficient and Expert (Figure 1). The terms competency and competencies refer to specific skills.

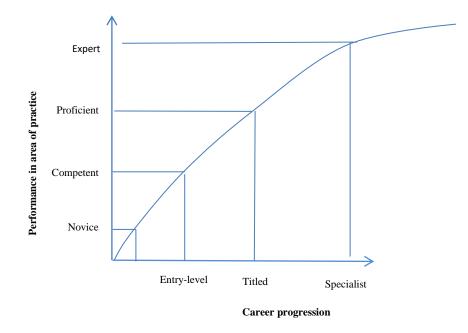


Figure 1: Career progression-performance curve (adapted from Khan & Ramachandran, 2012, Fig 4, p. 923, which was in turn adapted from work by Dreyfus & Dreyfus, 1980, and ten Cate, Snell & Carraccio, 2010).

The 'competent' performance level is the performance required for graduates of approved entrylevel courses in Australia, for overseas trained physiotherapists, and for persons seeking reregistration after an absence. It is also the level required to maintain registration, and the level expected of a practitioner moving to a different area of practice after some time in the workforce. The expected performance for a practitioner at the 'competent' level is documented in the *Physiotherapy practice thresholds in Australia and Aotearoa New Zealand* (Physiotherapy Board of Australia and Physiotherapy Board of New Zealand, 2015).

For those who wish to pursue greater depth in an area of practice, there are two further levels of performance - Proficient and Expert – that reflect the titling and specialisation sentinel points on the career pathway (Figures 1 and 2). Table 2 outlines the current availability of titling and specialisation pathways by area of practice.

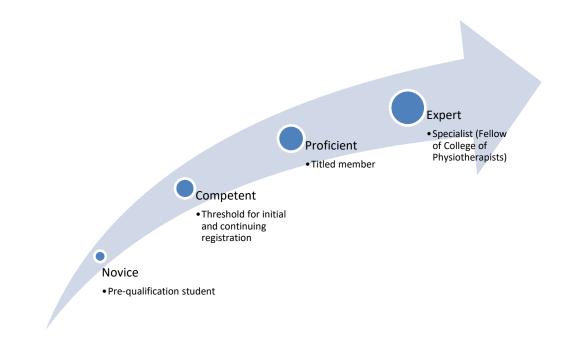


Figure 2: The career pathway by performance milestones

	APA National Groups Titling			Australian College of Physiotherapists
Area of practice				Specialisation
	Academic pathway	Hybrid Academic pathway	Experiential pathway	2-year training program
Animal	✓			
Cardiorespiratory	$\checkmark$		$\checkmark$	$\checkmark$
Continence & Women's Health	$\checkmark$	✓	✓	✓
Gerontology	✓		✓	✓
Musculoskeletal	$\checkmark$		$\checkmark$	$\checkmark$
Neurology	$\checkmark$		$\checkmark$	$\checkmark$
Occupational health			$\checkmark$	$\checkmark$
Paediatrics	$\checkmark$		$\checkmark$	$\checkmark$
Sports	$\checkmark$		$\checkmark$	$\checkmark$

#### Table 2: Current titling and Specialisation pathways by area of practice

Note: Pathway to Fellow of College of Physiotherapists by original contribution not shown.

## An educational framework

A consistent educational framework will provide educational design principles for application to a continuum of education for physiotherapists from the early entry-level, general interest CPD, through to titling and specialisation. It will seek to enhance engagement and learning through well-designed curriculum and effective assessment strategies.

A robust career pathway with quality-assured education offerings will be underpinned by an educational framework that comprises:

- competence standards that apply across all areas of practice and specify levels of performance at key points in the career pathway
- development of area-specific entrustable professional activities
- principles, policies and procedures to support CPD design, delivery and assessment
- guidelines and templates to guide educational design
- standardised monitoring and quality improvement processes

The objectives of the educational framework will be to:

- respond to evolving and changing health practice
- demonstrate quality and effectiveness of APA CPD activities
- promote consistency in the volume of learning, curriculum design, and assessment in APA CPD offerings

Such objectives would align with key objectives of the National Registration and Accreditation Scheme (NRAS), in particular from 3(2) of the National Law (Queensland Parliamentary Council, 2009):

- (a) to provide for the protection of the public by ensuring that only health practitioners who are suitably trained and qualified to practise in a competent and ethical manner are registered
- (c) to facilitate the provision of high quality education and training of health practitioners
- (f) to enable the continuous development of a flexible, responsive and sustainable Australian health workforce and to enable innovation in the education of, and service delivery by, health practitioners.

#### **Competence standards**

A necessary foundation for consistent educational design of CPD activities is a Professional Competence Standard that describes practice competence at key points along the career/ educational pathway. There is currently no shared set of competence standards to describe the level of practice expected at key points along a post-graduate education pathway. A harmonised competence standard provides a common framework against which educational offerings can be designed to ensure that intended learning outcomes are consistent, across groups, for the level of the educational activity. A single competence standard allows the identification of expected standards horizontally (offerings at the same level) and vertically (offerings at different levels). The characteristics of a contemporary competence framework (Lester, 2014) are that it:

- Reflects the need for practitioners to act intelligently and ethically, and to make judgements in complex and unpredictable situations, rather than attempting to provide universal prescriptions for practice
- Is capable of being adopted in different practice contexts
- Is future proofed by having less reference to specific regulations or other time-limited documents, specific procedures and current fads
- Uses clarity of language to describe competence precisely enough, without becoming overprescriptive or resorting to large amounts of detail
- Supports valid, robust and consistent assessment

It is important that generic descriptions of performance provided by competence statements are not confused with the curriculum or a syllabus. In educational design, curriculum refers to the overall learning outcomes, structure and content of a course, while the syllabus is information specific to a subject or short course that details the specific learning outcomes, content and assessment. It is only at the syllabus level that specific topics, knowledge and skills are detailed. While syllabus of APA CPD may change frequently in response to member feedback, changes in evidence and developments in scope of practice, the higher-level generic competence standards would require review over a longer time frame.

While role-based approaches to professional practice are not new, in recent years this approach has become a widely adopted approach to organising competence standards. The CanMEDS Framework, developed for the Royal College of Physicians and Surgeons of Canada (RCPSC) (Frank, 2005; Frank, Snell & Sherbino, 2015) organises competence statements under seven roles (Table 3). The Canadian Physiotherapy Association (National Physiotherapy Advisory Group, 2009) adopted the seven CanMED roles for entry-level competence standards, while in Australia and Aortearoa New Zealand a slightly different set of roles were adopted for the entry-level competence standards (Physiotherapy Board of Australia & Physiotherapy Board of New Zealand, 2015). The Australian Medical Council (AMC) organises its Graduate Outcome Statements for Primary Medical (AMC, 2012, p.2-4) and Intern Outcome Statements (AMC, 2014) in four role-based domains.

	Canada:	Australia: Physiotherapy	Australia: AMC entry-
Canada: CanMEDs	Physiotherapy entry- level	entry-level	level and interns
Medical Expert	Expert	Physiotherapy practitioner	Scientist and scholar
Communicator	Communicator	Professional and ethical practitioner	Practitioner
Collaborator	Collaborator	Communicator	Health advocate
Leader	Manager	Reflective practitioner and self-directed learner	Professional and leader
Health Advocate	Advocate	Collaborative practitioner	
Scholar	Scholarly Practitioner	Educator	
Professional	Professional	Manager/Leader	

Table 3: Com	naricon acros	c rolo bacad	compotonco	ctandarde
	parison acros	s role-based	competence	Stanuarus

The CanMEDs framework is designed to apply across the career continuum for physicians and surgeons. The competence standards are generic and apply across areas of practice. The application of the generic competence standards across different areas of practice, and across the development of competence at increasing levels of practice, is achieved through the concepts of the *Competency Milestone* which is "... an observable marker of an individual's ability along a developmental continuum" and the Entrustable Professional Activity (EPA) "...a key task of a discipline that can be entrusted to an individual who possesses the appropriate level of competencies". This enables the design of education and assessment appropriate to the progress of the trainee from junior resident to advanced expertise (Frank, Snell & Sherbino, 2014).

Another example of how competence standards can be adapted to reflect increasing levels of competence can be seen in the approach of the Royal Australasian College of Surgeons (2012) framework that specifies nine domains, each with "observable markers" at five stages:

- pre-vocational (performance expected when applying for selection into surgical training)
- novice (commencing trainee with aptitude for their specialty)
- intermediate (trainee who is progressing but still needs a reasonable amount of supervision)
- competent (trainee nearing the end of the training program, requires minimum supervision unless the situation is complex)
- proficient (performance expected of a Fellow)

The APA envisages that the Physiotherapy practice thresholds (Physiotherapy Board of Australia and Physiotherapy Board of New Zealand, 2015), which stipulate performance expected of a person at the 'Competent' level on the career pathway, will be used as a foundation for formulating competence statements for the 'Proficient' and 'Expert' levels. Additional 'key competencies' and 'enabling components' will be identified as necessary. For example, the practice thresholds include competence in utilising, but not in performing research. An additional level of performance, such as intermediate, could possibly be added between competent and proficient, identifying progress along the continuum.

For each 'enabling component' a description would be developed reflecting expected practice at sentinel points on the career pathway for a particular area of practice: entry-level, titled and specialist practice (Appendix A). These descriptions, and the relevant level of the Australian Qualifications Framework (2013), would be used to inform the design of educational material targeting the appropriate level of performance expected to be achieved in CPD offerings.

#### **Entrustable Professional Activities**

While the competence standards apply to all areas of practice, they provide only general descriptions of performance. The specific skills and knowledge relevant to each area of practice that would be required to meet the expected performance at each level will be determined by an appropriate expert group. This material would specify what in the CanMEDs are called "Entrustable Professional Activities" (EPAs). The activities are 'entrustable' in that the person has demonstrated an ability to perform the activity without direct supervision. EPAs therefore direct the design of formative feedback and summative assessment (assessment that is judged or graded). EPAs are

standardised education targets that translate the competence standards into observable clinical activities (ten Cate, 2013b).

Entrustable Professional Activities:

- reflect the expected performance level (novice, competent, proficient, expert)
- reflect the day to day work of the professional
- situate competence in the clinical context
- make sense to trainees, mentors and the public
- are observable and assessable

A sophisticated example (ten Cate, 2013a) of the use of EPAs has been developed the Royal Australian & New Zealand College of Psychiatrists (2012).

#### Alignment with the Australian Qualifications Framework

Although the APA is not a registered higher education provider, there is utility in aligning the career pathway and CPD offerings with the Australian Qualifications Framework (Australian Qualifications Framework Council, 2013). Formal higher education qualifications are integrated into the pathway at the Competent and Titled levels, and one university currently incorporates APA Level III sports course into its Master of Sports Physiotherapy. The AQF articulates the learning outcomes for 10 levels – from Certificate I to a Doctoral Degree. Entry-level Physiotherapy 'Doctoral' degrees are actually Masters (Extended) qualifications. APA CPD may designed to be at level 7/8 for courses aimed at entry-level performance (i.e. 'competent') in a particular area of practice, and at level 8/9 for the titled (proficient) and level 9/10 for specialist (expert). The summaries and learning outcomes criteria for relevant AQF levels are shown in Table 4.

#### Table 4: Australian Qualifications Framework Summaries and Learning Outcomes Criteria

	AQF 7	AQF 8	AQF 9	AQF 10
Degrees	Bachelor	Bachelor Honours Graduate Certificate Graduate Diploma	Masters (Research) Masters (Coursework) Masters (Extended)	Doctoral degree
AQF summary	AQF 7: Graduates at this level will have broad and coherent knowledge and skills for professional work and/or further learning.	AQF 8: Graduates at this level will have advanced knowledge and skills for professional/ highly skilled work and/or further learning	AQF 9: Graduates at this level will have specialised knowledge and skills for research, and/or professional practice and/or further learning	AQF 10: Graduates at this level will have systematic and critical understanding of a complex field of learning and specialised research skills for the advancement of learning and/or for professional practice
AQF knowledge	AQF 7: Graduates at this level will have broad and coherent theoretical and technical knowledge with depth in one or more disciplines or areas of practice.	AQF 8: Graduates at this level will have advanced theoretical and technical knowledge in one of more disciplines or areas of practice.	AQF 9: Graduates at this level will have advanced and integrated understanding of a complex body of knowledge in one or more disciplines or areas of practice.	AQF 10: Graduates at this level will have systematic and critical understanding of a substantial and complex body of knowledge at the frontier of a discipline or area of professional practice.
AQF skills	<ul> <li>AQF 7: Graduates at this level will have well-developed cognitive, technical and communication skills to select and apply methods and technologies to: <ul> <li>analyse and evaluate information to complete a range of activities</li> <li>analyse, generate and transmit solutions to unpredictable and sometimes complex problems</li> <li>transmit knowledge, skills and ideas to others</li> </ul> </li> </ul>	<ul> <li>AQF 8: Graduates at this level will have advanced cognitive, technical and communication skills to select and apply methods and technologies to:</li> <li>analyse critically, evaluate and transform information to complete a range of activities</li> <li>analyse, generate and transmit solutions to complex problems</li> <li>transmit knowledge, skills and ideas to others</li> </ul>	<ul> <li>AQF 9: Graduates at this level will have expert, specialised cognitive and technical skills in a body of knowledge or practice to independently: <ul> <li>analyse critically, reflect on and synthesise complex information, problems, concepts and theories</li> <li>research and apply established theories to a body of knowledge or practice</li> <li>interpret and transmit knowledge, skills and ideas to specialist and non-specialist audiences</li> </ul> </li> </ul>	<ul> <li>AQF 10: Graduates at this level will have expert, specialised cognitive, technical and research skills in a discipline area to independently and systematically:</li> <li>engage in critical reflection, synthesis and evaluation</li> <li>develop, adapt and implement research methodologies to extend and redefine existing knowledge or professional practice</li> <li>disseminate and promote new insights to peers and the community</li> <li>generate original knowledge and understanding to make a substantial contribution to a discipline or area of professional practice</li> </ul>
AQF application of knowledge and skills	<ul> <li>AQF 7: Graduates at this level will apply knowledge and skills to demonstrate autonomy, well developed judgement and responsibility:</li> <li>in contexts that require self-directed work and learning</li> <li>within broad parameters to provide specialist advice and functions.</li> </ul>	AQF 8: Graduates at this level will apply knowledge and skills to demonstrate autonomy, well developed judgement, adaptability and responsibility as a practitioner or learner	AQF 9: Graduates at this level will apply knowledge and skills to demonstrate autonomy, expert judgement, adaptability and responsibility as a practitioner or learner	AQF: 10 Graduates at this level will apply knowledge and skills to demonstrate autonomy, authoritative judgement, adaptability and responsibility as an expert and leading practitioner or scholar

Source: extracted from table on p.12 of the Australian Qualifications Framework

## The Physiotherapy Career Pathway Framework

The framework comprises the Career Pathway and Educational Framework. An overview of a possible framework is shown in Table 5.

The introduction of the Career Pathway Framework would enhance the quality and credibility of the education offered by the APA. Well-designed structures and processes would allow members, administrators and employers/managers to have confidence in the educational product and clarity as to the physiotherapists' attainments, and enable the APA to publically demonstrate the quality of the APA product.

A harmonised competence standard (and Entrustable Professional Activities) provides the basis for consistent learning targets at a specified level of practice that could apply to both APA CPD offerings, and those from external providers. The framework also allows responsiveness to changes over time in physiotherapy roles and practice and enable the introduction of specific new competencies (e.g. in prescribing).

In essence, much of the provision of CPD would not change. Groups would still determine the curriculum, select the teaching and learning activities and operate the delivery of the CPD. The College would determine CPD for physiotherapy specialists. However, introduction of an educational framework will require critical evaluation by course/lecture organisers, and may prompt review of existing CPD offerings to align them with the framework. For example, CPD Intended Learning Outcomes (ILOs) may need to be rewritten or adapted so they are aligned with a particular competence level (and eventually with EPAs) and assessment practices and design may need to be changed to ensure constructive alignment with ILOs.

The sophistication of assessment of learning will also need to be stratified – from informal assessment in some cases (e.g. occasional lecture) through to formal and highly structured summative assessment (e.g. written and clinical assessment for titling).

The education framework will be made up of policies, procedures and guidelines for curriculum design, assessment practices and quality control.

As the Career Pathway Framework is further developed, questions may arise relating to the current structure:

- Does the three level course model best serve the APA and its members?
- Can the processes of specialisation be educationally strengthened?
- Are there lessons to be learned from other professions, whilst maintaining titling and specialisation, that will enhance professional development and opportunities for members?

#### Why the need for change?

The present situation is one in which there is no unifying framework that guides the design and assessment of APA CPD activities. This means that quality and learning outcomes cannot currently be consistently demonstrated. The move to a competency-based approach to CPD, with clearly articulated levels of performance and consistent educational design support, will be to the

advantage of individual physiotherapists seeking to build a portfolio of activities for the purposes of maintaining competence and to advance their career. It will also assist the advocacy activities of the APA as such a framework is transparent and defensible.

#### **Local opportunities**

In a market place of dwindling higher education Masters by coursework offerings, there is an opportunity for the APA to strengthen its educational programs, where quality outcomes and rigorous assessment are in evidence.

Where a quality product is based on educationally sound principles and processes that are publically demonstrable, it opens the way for the APA to raise its profile as an education provider. In the future, it may open the pathway for Australian Physiotherapy Council accredited units provided by the APA to be recognised by health departments. Examples may be found in expanded scope practice, such as prescribing or injecting. Conversations may also be opened with higher education institutions about provision of elective units for student members, and to determine if credits towards enrolled units may be attained on completion of APA CPD programs for graduates.

Assessed CPD at the 'competent' level of performance may also be considered to be part of a reentry process for physiotherapists seeking to re-register, or as part of education required as a result of a Professional Standards Panel requirement.

Demonstration of educational credibility may more effectively facilitate members along the pathway of specialisation, and may facilitate or maintain eligibility for physiotherapists seeking membership of international physical therapy and other organisations in areas of expertise. In the future, there may also be an opportunity to revisit the question of specialist registration and endorsement of registration for an approved area of practice by the Physiotherapy Board of Australia.

A Physiotherapy Career Pathway Framework would enable the APA to more effectively examine its use of resources and determine support for educational activities. It will enable greater transparency across areas of the APA in what is required at each stage. The APA should be better placed to support the needs of various groups to establish and maintain quality programs when common competencies are in place and the progression clear. A common competence framework opens the potential for central curriculum modules to be developed once (e.g. risk management, cultural responsiveness, research literacy, quality assurance), and shared across groups, eliminating duplication. E-learning has much to offer in this area, combined with online assessment.

The development of the Physiotherapy Career Pathway Framework may open the door to a combined central CPD committee, where matters such as strategic innovations, sharing of expert educational input, course management issues, assessment and quality assurance activities can be decided to continuously improve education for members. This would be underpinned by the continuation of CPD/education committees in each group driving and updating curriculum in line with the framework.

#### **International opportunities**

It is likely there would be increased international marketability of programs, or a set of programs, in pathways demonstrating quality assured professional development, which could open new revenue streams. Currently, there is scope in the world physiotherapy arena, for a professional association to lead the way in progressive recognition of competency attainment through to specialisation in various areas of expertise.

There are significant opportunities to be had in promoting a progressive, measurable competencybased framework in multiple areas of expertise to the world physiotherapy community. There is also likely to be an international market for the development of online learning opportunities.

#### Table 5: Consolidated Career Pathway Framework

Career point	Student	Initial and continuing registration	Titled	Specialist
Performance level	Novice	Competent	Proficient	Expert
Current process		Registration with Physiotherapy Board of Australia	Eligibility for titling evaluated by relevant National Special Group	Specialist Fellow of the College awarded by the Australian College of Physiotherapists
Alignment with competence standards		Physiotherapy practice thresholds in Australia and Aotearoa New Zealand (2015)	To be developed	To be developed
EPAs		To be developed	To be developed	To be developed
Formal qualifications leading to sentinel point	Year 12 (direct entry) or at least one year tertiary study Relevant Bachelor degree	Undergraduate: • Bachelor • Bachelor (Hons) Graduate-entry: • Masters (Coursework) • Extended Masters (Coursework)	<ul> <li>Post-qualification:</li> <li>Graduate Certificate</li> <li>Graduate Diploma</li> <li>Masters (Coursework)</li> <li>Masters (Research)</li> </ul>	Post-qualification: Professional Doctorate PhD
Formal learning	APA Student education events Short courses from other organisations (e.g. Sports Medicine Australia)	Special group CPD incl level I course APA online learning Short courses from other organisations	Special group CPD incl level II and III courses APA online learning Short courses from other organisations	Australian College of Physiotherapy 2-year Specialisation training program
Informal learning		Conferences, workshops, seminars, in-service, journal clubs, lectures, webinars, social media (e.g. twitter, blogs) Self-directed reading and critical reflection	Conferences, workshops, seminars, in-service, journal clubs, lectures, webinars, social media (e.g. twitter, blogs) Self-directed reading and critical reflection	Conferences, workshops, seminars, in-service, journal clubs, lectures, webinars, social media (e.g. twitter, blogs) Self-directed reading and critical reflection
AQF level* leading to sentinel point		5-9 depending on type of enrolled degree and stage of course	8,9	9, 10

AQF = Australian Qualifications Framework. \* Some lower AQF levels may be relevant for generic qualifications (non-physiotherapy), such as Certificate IV Training and Assessment (AQF Level 4). EPA = Entrustable Professional Activities

## Signposts for development of the Career Pathway Framework

A staged development is required to build an effective Career Pathway and detailed educational framework. The outline of major signposts in the development is :

- Development of the competence statements for Proficient and Expert levels of performance in CanMEDS format.
- > Development of Entrustable Professional Activities for each area of practice
- > Review or development of policies, procedures, guidelines and templates.
- > Assessment of APA internal courses against the framework
- > Development of system of accreditation and re-accreditation (internal/external process).

## Appendix A

Key and enabling competencies	Competent(Entry-level)	Proficient(Titled)	Expert(Specialist)
Role 1: Physiotherapy practitioner			
1.1 plan and implement an efficient, e	ffective, culturally responsive and client	t-centred physiotherapy assessment	
1.1.B plan a physiotherapy assessment drawing on applied knowledge of pathology, anatomy, physiology, other core biomedical sciences relevant to human health and function and determinants of health relevant to the client's impairments, activity limitations and participation restrictions	Plans an assessment for clients with common presentations across core areas of physiotherapy practice	Plan an efficient and appropriate assessment for clients with complex presentations in the area of practice, drawing on knowledge of anatomy, physiology and pathology relevant to common client presentations in the area of practice.	Plan an assessment in challenging or unusual situations, drawing on a broad base and depth of knowledge of anatomy, physiology and pathology relevant to the breadth of client presentations in the area of practice.
1.1.D incorporate relevant diagnostic tests, assessment tools and outcome measures during the physiotherapy assessment	Selects commonly used diagnostic tests and standardised outcome measures appropriate to the client presentation. Checks for red flags.	Selects the most relevant tests for the purposes of diagnosis and outcome assessment on the basis of test characteristics. Applies a hypothesis testing approach to differential diagnosis.	Where appropriate applies expert pattern recognition to the process of differential diagnosis.

#### References

Australian Medical Council Limited. (2012). *Standards for Assessment and Accreditation of Primary Medical Programs by the Australian Medical Council 2012*, p.2-4. Retrieved from <u>http://www.amc.org.au/joomla-files/images/Accreditation/FINAL-Standards-and-Graduate-</u> <u>Outcome-Statements-20-December-2012.pdf</u>

Australian Qualifications Framework Council. (2013). *Australian qualifications framework Second Edition January 2013*. Retrieved from <u>http://www.aqf.edu.au/</u>

Australian Medical Council Limited. (2014). *Intern Training-National Standards for Programs*. Retrieved from <u>http://www.amc.org.au/joomla-files/images/intern-training/intern-training-intern-outcome-statements-2014-09-24.pdf</u>

Dreyfus, S. & Dreyfus, H. (1980). A five stage model of the mental activities involved in directed skill acquisition. Research Paper, California University Berkeley, Operations Research Centre, A155480. Retrieved from

http://oai.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier=ADA084551

Frank, J.R. (Ed.). (2005). *The CanMEDS 2005 physician competency framework. Better standards.Better physicians. Better care.* Ottawa: The Royal College of Physicians and Surgeons of Canada. Retrieved from

http://www.ub.edu/medicina\_unitateducaciomedica/documentos/CanMeds.pdf

Frank, J.R., Snell, L. & Sherbino, J. (eds.) (2014). *The draft CanMEDS 2015 milestones guide*. Royal College of Physcians and Surgeons of Canada. Retrieved from <a href="http://www.royalcollege.ca/portal/page/portal/rc/common/documents/canmeds/framework/canmeds\_milestone\_guide\_sept2014\_e.pdf">http://www.royalcollege.ca/portal/page/portal/rc/common/documents/canmeds/framework/canmeds\_milestone\_guide\_sept2014\_e.pdf</a>

Frank, J.R., Snell, L. & Sherbino, J. (eds.) (2015). *CanMEDS 2015 Physicial Competency Framework*. Ottawa: Royal College of Physicians and Surgeons of Canada. Retrieved from <u>http://canmeds.royalcollege.ca/uploads/en/framework/CanMEDS%202015%20Framework\_EN\_Red</u> <u>uced.pdf</u>

Health Workforce Australia. (2014). *Australia's health workforce series. Physiotherapists in focus.* Retrieved from <u>http://www.hwa.gov.au/sites/default/files/HWA\_Australia-Health-Workforce-</u> <u>Series\_Physiotherapists-in-focus\_vF\_LR.pdf</u>

Khan, K. & Ramachandran, S. (2012). Conceptual framework for performance assessment: Competency, competence and performance in the context of assessments in healthcare – Deciphering the terminology. *Medical Teacher*, 34:920-928.

Lester, S. (2014). Professional competence standards and frameworks in the United Kingdom. *Assessment & Evaluation in Higher Education 39(1): 38-52.* 

Physiotherapy Board of Australia. (2015a). Registration standard: Continuing professional development. Retrieved from <u>http://www.physiotherapyboard.gov.au/Registration-Standards.aspx</u>

Physiotherapy Board of Australia. (2015b). *Physiotherapy registrant data: September 2015*. Retrieved from <u>http://www.physiotherapyboard.gov.au/About/Statistics.aspx</u>

Physiotherapy Board of Australia and Physiotherapy Board of New Zealand (2015). *Physiotherapy practice thresholds in Australia and Aotearoa New Zealand*. Retrieved from <a href="https://physiocouncil.com.au/for-education-providers/accreditation-resources/">https://physiocouncil.com.au/for-education-providers/accreditation-resources/</a>

Queensland Parliamentary Council (2009). Health practitioner regulation national law act 2009. Retrieved from <u>http://www.ahpra.gov.au/About-AHPRA/What-we-do/Legislation.aspx</u>

Royal Australasian College of Surgeons. (2012). *Becoming a competent and proficient surgeon:Training Standards for the Nine RACS competencies*. Retrieved from <u>https://www.surgeons.org/media/18726523/mnl\_2012-02-24\_training\_standards\_final\_1.pdf</u>

Royal Australian & New Zealand College of Psychiatrists (2012). EPA handbook Stage 1 and 2. Retrieved from <u>https://www.ranzcp.org/Pre-Fellowship/2012-Fellowship-Program/Assessment-overview/Entrustable-Professional-Activities.aspx</u>

ten Cate, O., Snell, L. & Carraccio, C. (2010). Medical competence: The interplay between individual ability and the health care environment. *Medical Teacher*, 32: 669-675.

ten Cate, O. (2013a). *Editorial:* Competency-based education, entrustable professional activities, and the power of language. *Journal of Graduate Medical Education,* March: 6-7.

ten Cate, O. (2013b). Nuts and bolts of entrustable professional activities. *Journal of Graduate Medical Education*, March: 157-158.