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Content analysis of current role/job descriptors for Band 5/junior physiotherapists and mapping of these to Physiotherapy Professional standards of practice

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Abstract

Background **KNOWBEST** was a mixed methods study exploring the **KNOW**ledge, **BE**haviours and **S**kills required of the modern physio**T**herapy graduate.
Objectives To undertake a content analysis of current role descriptors (RDs) for Band5/junior physiotherapists and map these to the knowledge, skills, behaviours and attributes required for contemporary physiotherapy practice.
Design Content analyses and mapping.
Setting All health care settings:
Participants Available RDs for newly qualified/Band 5 physiotherapists across a representative range of roles and settings for this stage of a physiotherapist's career across the UK and all health care settings.
Methods Job descriptors were obtained using three approaches 1) via direct upload to the study website, 2) on-line searches of job vacancies, 3) directly emailing managers to fill any gaps in representativeness. Data regarding knowledge, skills, behaviours and attributes were extracted, coded (BC) and checked (CML).
Data analyses Documentary content analyses and mapping of these to Professional Standards of practice.
Results 19 RDs were analysed. High expectations of behaviours and attributes, and extensive pre-requisite knowledge and skills were identified and detailed. Considerable variability was seen across RDs, at least seven being suited to more highly specialist and/or experienced staff. Equality, diversity and inclusivity concerns were evidenced. Active research was not included in many RDs and not mentioned in any standards. Digital learning and skills were not strongly evidenced.
Conclusions A review of Band 5/Junior post and RD requirements is recommended including a standard template developed to promote equity. Professional standards emphasise some pillars of practice, such as clinical, more than others.

Contribution of the Paper

- Role descriptors for band 5/junior/recently qualified physiotherapists demonstrated wide heterogeneity in knowledge, skills, attributes and behaviours.
- Analysis of RDs revealed high expectations of behaviours and attributes, and extensive pre-requisite knowledge and skills in qualified physiotherapists.
- A review of Band 5 post and role descriptor requirements is recommended and a standard template developed and designed to promote equity.

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- Findings indicate that some areas of physiotherapy practice are featured less strongly in professional standards of practice than others. It is evident that some of the pillars of advanced practice, such as clinical practice, are weighted more heavily than others.

Keywords: Physical therapy specialty; Professional practice; Content analysis; Mapping to professional standards

Introduction

The goal of physiotherapy education is to facilitate the continuing intellectual, professional and personal development of students and qualified physiotherapists [1]. Physiotherapy practice is continuously evolving for the benefit of patients and public health and changes need to be reflected in competences, education programme benchmarks, and professional standards [2]. In the UK the Chartered Society of Physiotherapy (CSP) provides principles for learning and development for CSP accreditation of qualifying programmes in physiotherapy [3]. The CSP commissioned the KNOWBEST project to inform their review of physiotherapy education guidance and its appropriateness to prepare a contemporary physiotherapy workforce equipped to meet the changing demands upon the profession and health and social care in the UK [4]. KNOWBEST was a mixed methods study which explored the KNOWledge, BEhaviours and Skills required of the contemporary physioTherapy graduate including the future role of practice-based learning [5]. Twelve recommendations were developed during the study and were considered, and accepted, by the CSP.

KNOWBEST incorporated a range of methods to allow the project team to engage maximally with key stakeholders. This included crowdsourcing, focus groups and one-to-one meetings to obtain data. KNOWBEST also analysed written data. One source of written data is job/role descriptors. These are provided for applicants applying for a physiotherapy job vacancy and they identify the role the successful applicant will be employed to carry out and the knowledge, skills, behaviours, attributes and experience required to fulfil the role. They therefore provide an insight into employers' expectations of the role/job which was considered relevant, together with all KNOWBEST data, in the subsequent development of recommendations for the profession. The second stage of KNOWBEST, following its scoping review of practice-based learning and simulation, was to undertake a content analysis of current role/job descriptors (RDs) for recently qualified, band 5 and junior physiotherapists and map these to the knowledge, skills, behaviours and attributes required for contemporary physiotherapy practice. Content analysis of RDs and person specifications and mapping these to professional standards has successfully been used previously to explore the use and development of Advanced Clinical Practice in Maternity Services [6].

In the UK there are multiple routes to qualification including undergraduate degrees, pre-registration masters degrees, pre-registration doctorate degrees (Scotland), BSc Apprenticeship degrees (England) and MSc Apprenticeship degrees (England). Programme duration varies from 2 to 4 years depending upon the degree and programmes also vary in regard to content which are accredited by the CSP and approved by the HCPC (Health and Care Professions Council). All physiotherapists will have undertaken a minimum of 1000 hours practice-based learning prior to qualification. UK Physiotherapists are autonomous practitioners, receiving referrals from health care professionals and directly from patients. Whilst many work within the NHS, many others work for the independent sector, private practice, for charities and in education and social care settings.

The aim of this study was to undertake a cross sectional study with content analysis of current role descriptors and map them to the knowledge, skills, behaviours and attributes required for contemporary physiotherapy practice.

Methods

Design

Stage 1: Documentary analyses of role descriptors. Stage 2: Mapping to Health and Care Professions Council (HCPC) and CSP professional standards.

Stage 1: inclusion criteria

The team included RDs for Band 5 (NHS)/newly qualified (independent or private sector) physiotherapists across a representative range of roles and settings undertaken/possible at this stage of a physiotherapist's career. The purposive inclusion criteria included jobs:

- across the UK.
- full-time, part-time, locum.
- in the NHS, independent and private sectors.
- rotational and static posts.
- in primary, secondary, tertiary and a mix of these levels of care.
- for a wide variety of types of physiotherapy positions.
- predominantly rural, predominantly urban and city-based jobs; defined using UK census data [7].

There were a variety of terms used for RDs: some employers included separate job descriptors and person specifications, others combined these in one document and some (private) job advertisements requested a *curriculum vitae* (CV) instead (these were not included). For this project we use the term RD to describe all forms of information bar CV.

Data collection

Job descriptors were obtained using three approaches.

1. Physiotherapists and managers could upload job descriptors directly to the KNOWBEST website https://www.health.herts.ac.uk/elearning/knowbest/
   The project and website were advertised extensively using twitter, the CSP email newsletter, the CSP magazine 'Frontline', emailing CSP professional networks and during a networking session run by the team at the vPUK 2021 conference.
2. The team searched job vacancies on-line on a wide-range of websites advertising NHS, independent sector and private jobs (Supplementary file 1). Google was searched for 'UK Band 5 physiotherapy vacancies' and 'UK Band 5 physiotherapy jobs'. Searches took place during November and early December 2021.
3. The team directly emailed some managers directly to 'fill in gaps' not identified via approaches 1 and 2.

Choosing role descriptors

The team developed a grid containing the inclusion criteria (Supplementary File 2). Each RD was added into appropriate grid cells for their UK home country/countries, role types, specialities, health care settings and rural/urban areas. It was anticipated that 15 to 20 role descriptors would be needed to populate all the cells in the grid to achieve representativeness with respect to the inclusion criteria. Unusual RDs were added to the grid first, for example there was only one RD identified within an oncology speciality, then additional role descriptors were added, ensuring all cells were appropriately populated. Where there were multiple RDs/vacancies from a single employer, only one was used to allow as many different employers to be included as possible. After analyses INITIALS read all additional RDs identified during the project that had not been included in the grid: searching specifically for further relevant information.

Data analyses

Documentary analysis enabled the systematic reviewing and evaluation of RDs to elicit meaning, gain understanding and develop knowledge [8]. A directed content analysis approach was utilised [9]; drawing on the terms from the CSP brief as key concepts for initial colour coded categories:

Knowledge: the theoretical or practical understanding of a subject.
Skills: ability to do an activity or job well, involves practicing.
Behaviours: the ways in which one acts or conducts oneself.
Attributes: the quality or feature regarded as a characteristic or inherent part of someone/something.

During coding the team looked for additional codes/information related to the aims of KNOWBEST [9]. Relevant text that could not be categorised with the initial codes, such as text about equality and diversity, were given new codes and included in data analyses [9].

Pilot

One role descriptor was independently coded by three researchers (INITIALS), using the coloured codes above to highlight text and write comments. The results were placed side by side in a table and areas of difference and overlap between the codes were discussed. Data were then independently coded for two further RDs (one NHS and one independent company) by INITIALS and compared (INITIALS). Areas of difference remained therefore, to promote rigour, data continued to be coded and reviewed by two team members.

Data extraction

Data were extracted into word documents INITIALS. The meaning and frequency of codes were presented in a table. INITIALS reviewed the codes, then both researchers discussed any areas of difference and decided the code via discussion.

Stage 2: Data were then mapped against the HCPC Standards of Proficiency for Physiotherapists [10], HCPC Standards of Conduct, Performance and Ethics [11] and the CSP Code of Members' Professional Values and Behaviours [12]. The HCPC set and regulate standards for safe, effective and professional practice in the UK: physiotherapists must meet these standards to maintain their professional registration. The CSP Code sets out the CSP's expectations of all members (physiotherapists, associates and students) and is centred around the needs of patients/clients. Standards were read repeatedly until the researchers were familiar with them (INITIALS). Each standard was considered and compared with the data and a judgement made regarding the extent to which the data matched the standard (INITIALS) with discussion with the team).

Results

Thirty-four eligible RDs were available for inclusion. Nineteen RDs were included to populate a grid affording representativeness with respect to UK home countries, role types, specialities, health care settings and rural/urban areas (Table 1). RD data were summarised and is presented visually in Fig. 1. The extensive raw data is available [13].

Knowledge

The required knowledge listed in RDs for Band 5/newly qualified physiotherapists is extensive, ranging from Physiotherapy Professional standards/guidelines to an exhaustive list of Trust/Departmental/ Employer guidance and other policies, registration, standards and values. Profession specific knowledge included: anatomy and physiology, the patient journey (assessment through to discharge/referral including complex patients, understanding people, biopsychosocial approach), audit, research and service improvement, knowledge of technologies, reflection on practice/development as a practitioner. Examples of broader knowledge required included the assessment of risk and healthcare systems, use of electronic health records, legal and ethical issues and impacts on practice, understanding of legal responsibilities of the profession (including record keeping), and consent.

Table 1
Role descriptor characteristics.

Category	Domains within category	RDs including this domain (n =)
Country	England	12
	Scotland	4
	Wales	2
	Northern Ireland	1
Type of Post	Static / rotational	13/6
	Full / part time	13/3
	Locum	2
	Bank/Flexible	1
Speciality	Multiple (rotational)	4
	Musculoskeletal	4
	Community	2
	Neurological	2
	Paediatric	2
	Respiratory	2
	Other (e.g. *Obstetrics & Gynaecology, Oncology)*	4
Setting	Secondary care	4
	Tertiary care	2
	Primary care	0
	Multiple levels of care	7
	(rotational)	3
	Private practice	2
	Independent sector	1
	Multiple levels of care (static)	2
	Other (e.g. charity, schools)	
Area	Predominantly urban	12
	Predominantly rural	5
	Urban city	3

NB: Numbers do not all add up to 19 due to some RDs containing multiple options for some categories.

Skills

Profession specific, generic, organisational, physical and non-physiotherapy specific skills were all included. Profession specific skills included patient assessment, effective and sensitive communication (able to modify as required e.g. verbal/non verbal/written), devising/delivering/modifying treatments, documentation and record keeping skills, ability to manage patients with communication and language difficulties, different cultural backgrounds and with a person centred approach. Generic skills included advising others, evaluation of self (including self-development) and others and excellent interpersonal skills.

Organisational skills included: caseload management**,** delegating and supervising others**,** prioritising workload**,** flexibility and responsiveness to service demands**,** team working**,** reasoning/critical appraisal supporting research and audit. Physical skills were required to meet the physical demands of the post. Non physiotherapy specific skills were also mentioned including ability to drive.

Behaviours

Mirroring to some extent the skills noted above, four main categories of behaviours were revealed:

1) Practice related – e.g. assessments and treatments, caseload management and supervision of others and behaviours to optimise patient outcomes such as communication.
2) Professional – e.g. adhering to departmental, employer and professional policies, standards and codes of practice, assessing risk, safeguarding and using equipment safely.
3) Promotion of self-care and development – e.g. continuous professional development (CPD) (i.e. in service training and appraisals).
4) Service enhancement or improvement – e.g. audit, research and initiatives such as clinical pathway development.

Attributes

Frequently mentioned attributes included being an autonomous practitioner, working independently, being responsible for engaging with, and recording, personal professional development, being legally accountable and responsible for all areas of practice (including working within scope of practice), safety documentation, registration with HCPC/DBS/CRB checked and maintaining CPD, being experienced (clinically, in audit and research and specific areas of practice), flexibility and another 50 discrete attributes were mentioned (including ability to manage

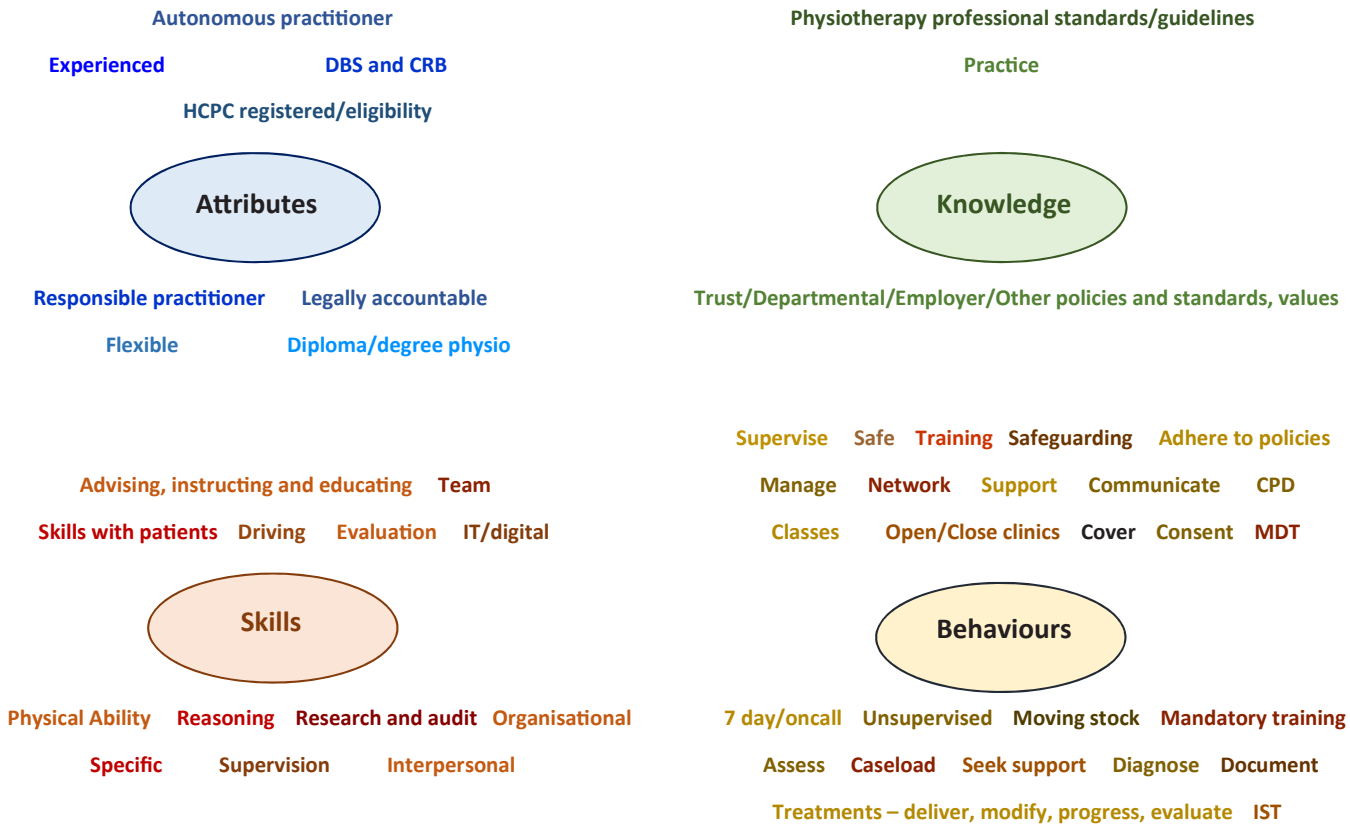

Fig. 1. Summary of attributes, knowledge, skills and behaviours from the content analyses.

stress, kindness, respect). Some RDs ($n > 7$) clearly required experience beyond that commensurate with a newly qualified Band 5 post. For example, specifying the role was for a specialist/experienced Band 5 or requiring recent post-qualifying experience or demonstrable advances in clinical skills from post graduate courses. Some RDs required experience of specific physiotherapy approaches (i.e. pulmonary rehabilitation or obstetrics and gynaecology) and previous Band 5 experience in specific rotations. Some RDs from the independent/private sector described offering benefits, such as private medical and dental insurance and financial rewards for joining, help with finding a job, referring a friend (£250 to £1000) or £100 towards HCPC fees. Only one NHS Trust made reference to benefits offering 'city weighting additional money', ticket ballots for sports and arts events, sporting facilities, Trust clubs and childcare support. One independent/private sector RD mentioned flexible working. Equality, diversity and inclusivity was identified as a new code during analyses and an apparent mismatch in expectations noted. Employers required employees to be physically active and dextrous, deal with faints/falls etc., however, minimal commitment ($n = 1$) to employer responsibilities to applicants was evidenced in relation to protected characteristics and equity. Some RDs showed elements of indirect discrimination such as requirements for driving skills, being a car owner/driver or the ability to travel daily for cross site meetings in large geographical areas.

Mapping to standards

Less than half of Band 5 RDs ($n = 7$) included applicants having knowledge of HCPC standards, although the majority ($n = 12$) included knowledge of CSP standards. Active research was not included in many RDs and is not mentioned in any standards. Digital learning and skills were also not strongly evidenced in Band 5 RDs and standards. Specifically:

1) The HCPC Standards of Proficiency: generally met across all RDs as a whole but not within individual RDs.
2) The HCPC Standards of Conduct, Performance and Ethics: not met across or within all RDs.

Fig. 2 presents a summary of mapping to these HCPC standards

3) The CSP Code of Members' Professional Values and Behaviour: a mixed picture was found for the four main principles.

This included:

i. CSP members take responsibility for their actions. Generally this was met, although acting within scope of practice was rarely included.
ii. CSP members behave ethically. Acting with integrity, honesty, respect and openness. Fair access to services and addressing inequalities are less/not well evidenced.

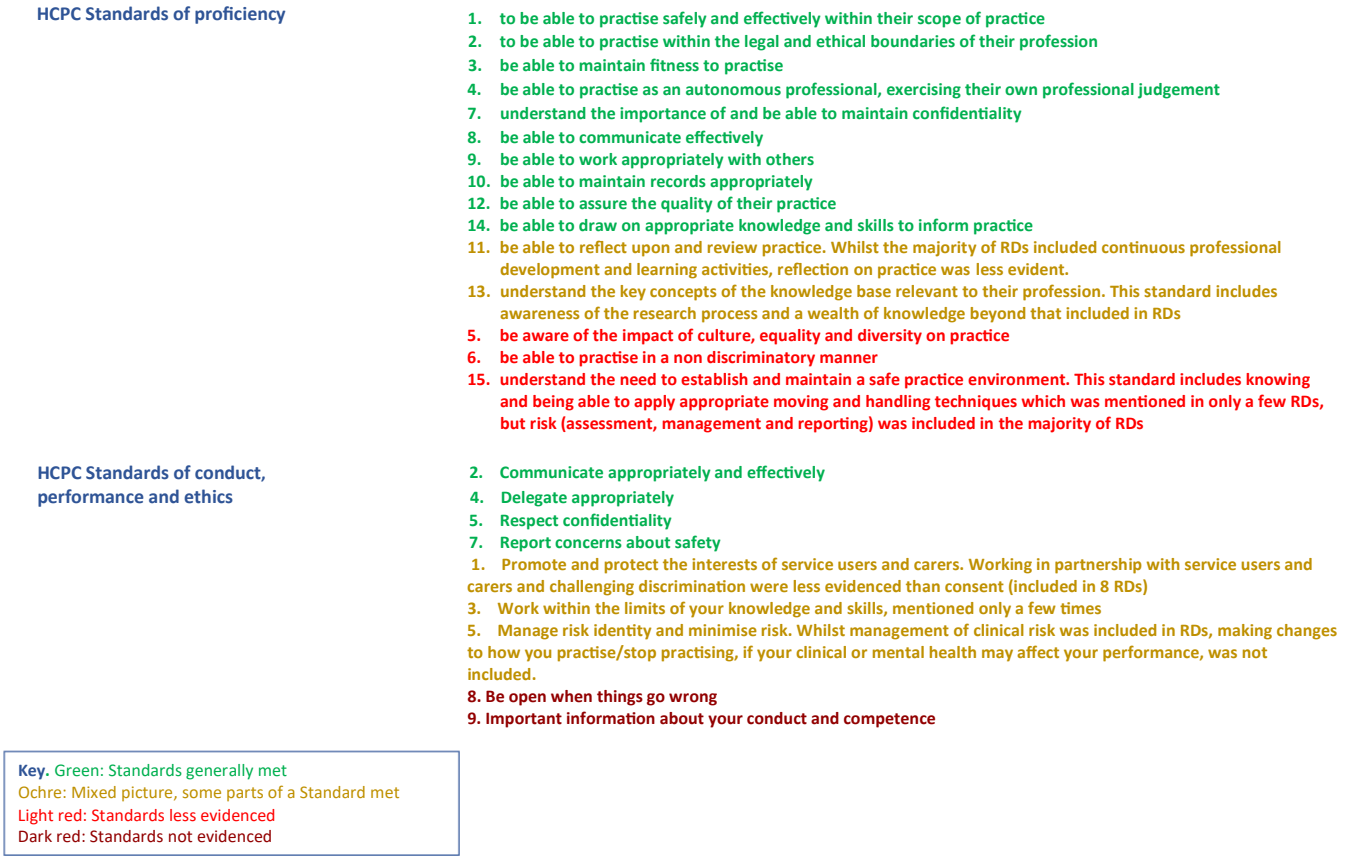

Fig. 2. Mapping of RDs to HCPC standards.

iii. CSP members deliver an effective service. Areas such as communicating and working effectively with others were well evidenced. Areas such as respecting and promoting individuals' autonomy were less/not well evidenced.
iv. CSP members strive to achieve excellence. Areas such as service improvement are well evidenced. Others, such as contributing to the development of physiotherapy practice were less well evidenced.

Discussion

Analysis of RDs revealed high expectations of behaviours and attributes, and extensive pre-requisite knowledge and skills in qualified physiotherapists. Considerable overlap exists between knowledge, skills, behaviours and attributes, where for example, a behaviour may need knowledge and skills and professional attributes for use in practice. The KNOWBEST report presents the recommendations for practice in full, including how practice-based learning has expanded beyond the clinical setting, championing Simulation based learning, requiring pre-registration physiotherapy programmes to map the curriculum to the four pillars of practice when they apply for accreditation/re-accreditation, interweaving equality, diversity, inclusivity and digital skills throughout the curriculum and broadening relevant experience of person-centred healthcare delivery [5]. Recommendation 12 called for proactive collaboration with physiotherapy managers/employers and the profession as the nature of physiotherapy practice continues to evolve. We have moved beyond the traditional ward/hospital based placements, expansion of core placements reflecting all health care settings, in particular the shift to primary care, and the needs of the UK population is underway. Essential key transferable skills need to be identified by employers, clinicians and educators to enable students to qualify with these key skills and expectations need to be transparent and realistic. The growing body of research, patient complexity and complexity of care demand higher-require critical thinking skills which involves the application of knowledge and experience to identify patient problems and direct clinical judgements and actions that result in positive patient outcomes [14]. Newly qualified physiotherapists can lack experience which can impact upon clinical reasoning, with limited understanding of the clinical implications of data gathered and minimal use of pattern recognition [15]. New/novice physiotherapists have reported less confidence, greater stress and need for support than experienced physiotherapists even when their physiotherapists even when their responses regarding a clinical vignette are similar [16].

It is evident that some of the pillars (of advanced practice) are weighted more heavily than others, i.e. clinical

practice. While the majority of RDs included the role of Band 5 physiotherapists in supporting and contributing to the improvement of physiotherapy services, fewer mentioned research activities and skills. Six RDs mentioned Band 5 physiotherapists being involved in or participating in research activities, one mentioned collecting data but only two described clear active research behaviour. In terms of leadership, this was evidenced by means of caseload management, including lone working. In terms of education, many RDs included clear activities to facilitate learning. Since this research was undertaken the HCPC standards for practice have been revised and come into effect 1st September 2023 [17]. The new standards now recognise that leadership is a skill for all members who are required to demonstrate leadership qualities, behaviours and approaches. The language around research has been changed from the rather passive 'being able to use' to the more active voice to 'use research, reasoning and problem-solving skills when determining appropriate actions'. There are new requirements to promote and engage 1) in the learning of others, 2) with healthcare technologies and health infomatics, 3) with service users in research where appropriate, 4) promote health and well-being and 5) evaluate data about trends in population health to inform practice. The introduction of these new standards are likely to lead to revised RDs in the future including all pillars of practice. Additionally, the CSP are developing a digital career framework to support members navigate their professional development across the pillars of practice. From a wider allied health professions perspective, the pillars of practice are embedded in many of the professional frameworks for AHPs [18–20]. The CSP are also currently in the process of commissioning research to transform quality in pre-registration physiotherapy education which will impact upon curricula and programme design.

Considerable variability was seen across RDs, with respect to length (< 1 to 14 pages) and appropriateness, with at least seven being suited to more highly specialist and/or experienced staff requiring post-graduate knowledge and expertise. Some RDs appeared to be written for more senior roles than expected for Band 5 or junior staff and this needs to be further explored. Whether financial pressures in the NHS or other differences in terms of the workplace setting, organisation or specialism account for this variability needs to be researched. In some instances, the geographical location was linked to higher band posts rarely becoming available, necessitating staff to remain at Band 5 even though sufficiently experienced and skilled to move to a higher band. Enabling members to achieve their full potential at work or when learning is a key tenet of the CSP corporate strategy 2023 to 2027 and supporting members to develop careers in line with established career pathways across the four pillars is a key strategic priority [21]. Equity is an important component of this, staff should be treated fairly across the band/role for which they are employed [22]. The NHS also needs to better support staff to retain them in the workforce [23].

With regard to equality, diversity and inclusivity (EDI) there was an apparent mismatch evident between the requirements expected of physiotherapists and the lack of an EDI approach from employers. The issues identified indicate greater attention to EDI matters is required from employers to avoid indirect discrimination. Only one RD stated that the employer was committed to ensuring that no job applicant or employee would receive less favourable treatment on any EDI grounds. Overall, as standalone documents, these job advertisements and RDs suggest a lack of engagement with equalities legislation [22]. It is important to be cautious, however, as other parts of the recruitment process followed by these employers may include inclusive practices not contained in RDs, for example asking applicants to complete equality and diversity monitoring forms and/or ensuring reasonable adjustments are put in place for interviews which might be stated in accompanying communication such as an invitation for interview. Having said this, there is a duty under the Equalities Act for employers to avoid indirect discrimination (rules or arrangements that apply to everyone, but which in practice could be less fair to someone because of their sex, race or other protected characteristic) and so these RDs would need to be reviewed and modified. Again, the new HCPC standards have explicitly and significantly expanded with regard to EDI [17]) emphasising its importance across all areas of practice and the requirement for members to understand equality legislation and apply it to their practice, to be able to make and support reasonable adjustments in theirs and others' practice and to challenge barriers to inclusion.

Findings revealed financial benefits or incentives were offered to attract Band 5s/newly qualified graduates joining an independent or private workplace that NHS employers currently do not offer or match. Yet pre-registration practice-based learning is predominantly provided by the NHS. There is a need to explore how non NHS health care providers (such as the independent/private sectors) can contribute to the education of pre-registration physiotherapists, to offer more opportunities for practice-based learning and promote the benefits of placements across health care sectors and settings [13].

Limitations

This is a cross sectional snapshot of RDs from a relatively brief time period. As such, change over time could not be explored and the profession is constantly changing [1,2]. The tight project timescales and resources available prevented all 39 RDs identified from being analysed, however un-analysed RDs were all read and no new codes identified. This study explored RDs for band five and junior physiotherapy roles, RDs for more senior bands/roles need

similar exploration. It is also acknowledged that this study concentrates upon UK physiotherapy and that knowledge, skills, behaviours and attributes vary across physiotherapy globally and the diverse nature of practice [1,24].

Conclusion

Given the observed heterogeneity in knowledge, skills, attributes and behaviours included across the sampled RDs, a review of Band 5 post and RD requirements is recommended and a standard template designed to promote equity. Research to explore and understand managers and/or employers perspectives would be beneficial. Findings indicate that some areas of physiotherapy practice are featured less strongly in professional standards of practice than others. Physiotherapy professional practice and roles have expanded, and will continue to develop, with career pathways into research, leadership and management. Professional standards for practice also need to evolve as the profession changes and as the new UK HCPC standards demonstrate, these processes are underway. Aligning RDs to these updated standards is rapidly needed to respond to changes in our profession.

Ethical approval

Approval from Health, Science, Engineering and Technology ECDA: HSK/SF/XX/04680 Ethics Committee at the University of Hertfordshire.

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Conflict of interest

Reena Patel is an employee at the CSP.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.physio.2024.101421.

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