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Practice-Based Learning
work

Overview

This study aimed to investigate university-based preparation of physiotherapy practice-based educators, in order to explore perceived needs and identify principles of good practice. Physiotherapy (alongside occupational therapy, radiography, dietetics and nursing) was studied throughout the UK and Ireland. Questionnaires were sent out to all pre-registration physiotherapy courses (n=37) and 21 were returned, giving a response rate of 57%. The questionnaire findings were synthesised with analysis of policy documents and the wider literature

Current practice

Students must complete a minimum of 1000 hours of assessed satisfactory clinical practice under the supervision of a practice-based educator, who must be a registered physiotherapist. All universities provide training for clinical educators, but the nature of provision varies. There is a nation-wide shortage of clinical placements within physiotherapy at a time when student numbers are rising. The debate on how to counteract the placement crisis centres on three main issues:

- The requirement for specialist physiotherapy practice placements in defined areas.
- Models of clinical supervision where physiotherapy practice educators are responsible for more than one student.
- The timing of physiotherapy placements within the curriculum and competition for placements in particular geographical areas.

The perceived benefits of being a clinical educator include the contribution it makes to continuing professional development, fulfilment of professional responsibility and the opportunity to market services to potential recruits. Problems associated with taking students on placement were perceived to derive largely from resource constraints.

Discussion

Several areas of innovative practice emerged in the areas of practice educator preparation, interprofessional student learning, models of student supervision and evidencing student competence in specialist areas. The Chartered Society of Physiotherapy has recently launched a scheme for accrediting clinical educators (ACE) that it hopes will be adopted across all courses.

Summary

Increasing student numbers places growing pressure on an already stretched placement resource. There are many challenges in providing appropriate clinical learning experiences, particularly as physiotherapy moves increasingly towards primary care and interprofessional working. It is recommended that managers, universities and the multidisciplinary team should adopt key roles in supporting physiotherapy practice-based educators.

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CASE STUDIES PHYSIOTHERAPY

An Overview of the Nature of the Preparation of Practice Educators in Five Health Care Disciplines

section **six**

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Profile

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The Chartered Society of Physiotherapy (CSP) states that practice-based learning forms an indispensable and integral part of the learning process and is vital to students' educational and professional development (CSP 2002a). The Department of Health (DoH) acknowledges that students' practice experience is an important way of preparing students in a variety of settings and of crossing boundaries (DoH 2000).

This scoping study was undertaken nationally to obtain information on pre-registration physiotherapy education from Universities throughout England, Ireland, Scotland and Wales.
The aim of the study was to:

- Audit university based preparation of practitioners for their educational role in supporting students during practice placements.

- Identify principles of good practice that emerge from the audit.

- Identify practitioners' needs in the provision, support and supervision of practice-based learning.

- Agree on principles of good practice that meet the identified needs.

Organisation of the Case Study

The case study will define and describe the scope of physiotherapy practice and physiotherapy education, with extensive reference to Chartered Society of Physiotherapy (CSP), Department of Health (DoH), Health Professions Council (HPC) and Quality Assurance Agency (QAA) policy and guideline documents. The findings of the questionnaire audit of Higher Education Institutions (HEIs) will be presented, juxtaposed with evidence from specific physiotherapy literature as appropriate. The questionnaire was used to identify areas of innovative practice and to gather factual information about physiotherapy education, its context and the approach of HEIs to practice-based educator preparation. Although some quantitative findings are presented there is no claim to generalise from the findings of the questionnaire to all physiotherapy courses. Examples of innovative practice that were notified through the questionnaire are included in this report as exemplars. The authors acknowledge that there will be many further examples that have not been notified. The case study then identifies areas of good practice and debates the discrepancy between rhetoric and reality. The final part of the case study offers conclusions and makes recommendations.

section **six**

The Nature of Physiotherapy

Physiotherapy has been defined within the Chartered Society of Physiotherapy (CSP) curriculum framework for qualifying programmes:

'Physiotherapy is a health care profession concerned with human function and movement and maximising potential. It uses physical approaches to promote, maintain and restore physical, psychological and social well-being, taking account of variations in health status. It is science-based, committed to extending, applying, evaluating and reviewing the evidence that underpins and informs its practice and delivery. The exercise of clinical judgement and informed interpretation is at its core.'

(CSP 2002).

The Quality Assurance Agency (QAA) for Higher Education sets out a range of benchmark statements for physiotherapy under three headings:

- Expectations of the health professional in providing patient/client services, e.g. professional autonomy and accountability.

- The application of practice in securing, maintaining or improving health and well-being, e.g. identification and assessment of health and social care needs.

- The knowledge, understanding and skills that underpin the education and training of health care professionals, e.g. the structure and function of the human body, together with a knowledge of dysfunction and pathology

(QAA 2001)

The benchmark statements provided by the QAA are fully integrated into the core curriculum (CSP 2002a), which sets out how physiotherapy students should be prepared for their future professional practice.

Physiotherapists work autonomously and their assessment considers physical, psychological, cultural, social and environmental factors and the impact these have on individuals' functional ability and the needs of their carers. Physiotherapy interventions include manual therapy, therapeutic exercise and electro-physical modalities, to address problems of impairment, activity and participation in people of all ages, with a wide range of recovering, stable and deteriorating conditions. Physiotherapists are able to practice as first-contact practitioners or in response to referrals from other health care professionals. They have a growing role in health education, through advising and teaching patients, carers, other health care professionals and support workers, in order to promote individuals' independence and well-being (CSP 2002a).

Traditionally, physiotherapy has been located within uni-professional departments in the acute care sector, but increasingly the focus of practice is moving towards primary care and inter-professional working. Creating an appropriate learning experience to prepare physiotherapy students for their future professional role therefore represents a significant challenge for higher education and the practice environment. Pre-registration programmes must equip physiotherapy students with the attitude, aptitude and capacity to cope with change, uncertainty and unpredictability and with a commitment to the concept of continuous quality improvement (CSP 2002a).

There are nine outcomes of the CSP core curriculum, and the inter-relationship between them and the characteristics and behaviour of a physiotherapist are shown in Figure One.

Figure One: Inter-relationship between CSP core curriculum outcomes and the characteristics of a physiotherapist
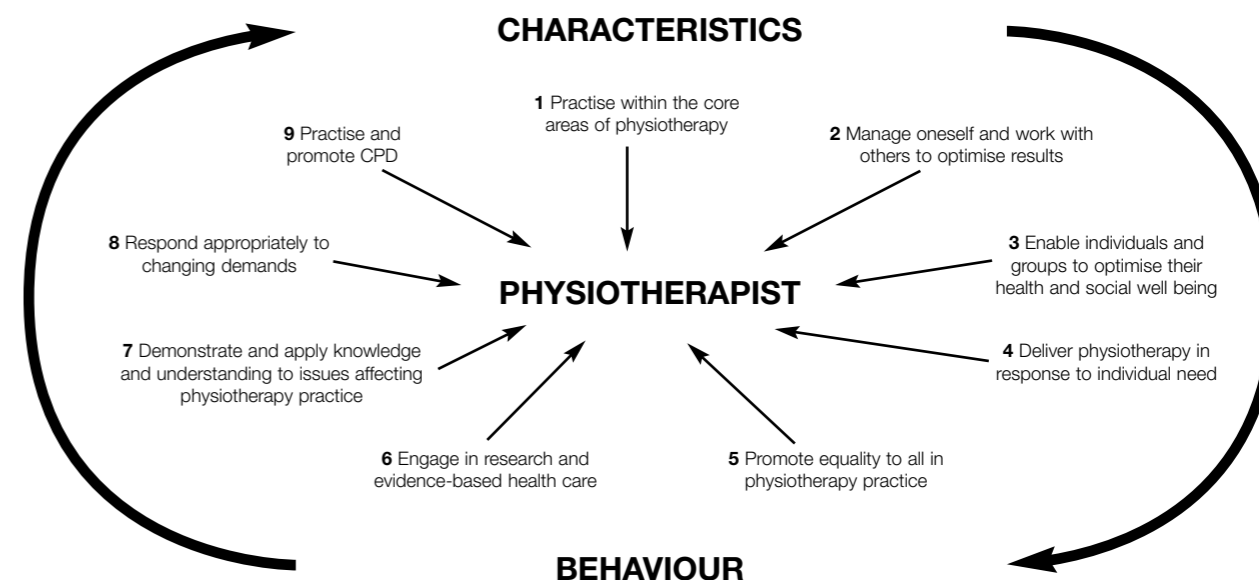
Reproduced from CSP Curriculum Framework (CSP 2002a)

The framework draws heavily on the CSP's Standards of Physiotherapy Practice (CSP 2000) and its Rules of Professional Conduct (CSP 2002b). It explains the importance of physiotherapy students being exposed to learning environments in which professional behaviours, attitudes, frames of reference and personal constructs are openly explored, debated and critically reviewed. Students need to be helped to engage in these challenging processes through experiential learning. They should be supported in using previous experiences, clinical reasoning and reflective practice to develop new knowledge and awareness, and encouraged to question and challenge current thinking within both university and practice-based settings.

Source of Funding

In England, Wales and Northern Ireland, funding for entry to undergraduate pre-registration physiotherapy (BSc (Hons) Physiotherapy courses) is via a National Health Service (NHS) means-tested bursary. An application for a bursary is normally made through the relevant university physiotherapy department on behalf of the student, once he/she has been offered a place. Students who are awarded bursaries also get their course fees paid and are eligible to apply for a Student Loan in the same way as any other university student. Some postgraduate pre-registration courses (MSc Physiotherapy) are self-funded while others qualify for a bursary.

Roles and Responsibilities in Practice Education

The learning gained from practice placements contributes significantly to the students' educational and professional development (CSP 2002a). Whilst on placement, the student physiotherapist works closely with a practice based educator, who will provide supervision, facilitate learning and assess competence (Moore et al 1997). Students need to learn through direct contact with patients, as well as through experience of the broader issues of health care within a variety of settings (CSP 2002a). The learning of student physiotherapists should be a fundamental responsibility of all qualified physiotherapists

(CSP 2003) in order to ensure the next generation of professionals is competent to practice (DoH 2000a). The manner in which learning is supported within individual programmes is at the discretion of HEIs. Innovative approaches to programme design and delivery (particularly within components of practice-based and inter-professional learning) are actively encouraged (CSP 2002a). Learning achieved in university and practice-based settings should be wholly integrated, with the reciprocal relationship between theory and practice embraced and recognised. All those involved in supporting students' learning (including university lecturers, practice based educators and service managers) must have a shared and coherent view of the newly qualified physiotherapist's role and responsibilities (CSP 2002a). There must be a reciprocal relationship between university and practice-based learning and the role of the practice-based educator is key in the achievement of learning outcomes. The transition from 'supervisor' to 'educator' and the ability to deal sensitively with students from different cultural and ethnic backgrounds are examples of illustrative issues for clinical educators, shown in Table One.

Table One: Illustrative issues for clinical educators relating to practice-based learning

Illustrative issues for clinical educators relating to practice-based learning
- The transition from supervisor to educator
- Dealing sensitively with students from different cultural and ethnic backgrounds, with different ability levels, and at different stages of a qualifying programme
- Facilitating transfer of skills from one practice setting to another
- Enabling student to take control and responsibility
- Enabling ownership of learning and professional development
- Assessing students' learning

- Managing the failing student
- University-clinical placement relationship and broader issues of liaison
- Raising the profile of the clinical educator in practice-based and university settings
- Issues relating to the application of national and local standards and protocols (including The Standards of Physiotherapy Practice (CSP, 2000) and health and safety procedures)

Reproduced from the curriculum framework (CSP 2002a)

Professional Requirements and Standards

Entry to the physiotherapy profession is via honours degree status only. Clinical education is an integral part of the pre-registration curriculum and students are required to undertake approximately one third of their programme of study within the practice environment. Each student must provide evidence of at least 1000 hours of assessed satisfactory clinical practice to be eligible for State Registration (CSP 2002a) and must meet and thereafter maintain the Health Professions Council (HPC) standards of proficiency for physiotherapists (HPC 2003). Full-time undergraduate physiotherapy programmes are either three or four years duration and lead to graduates becoming Chartered and State Registered Physiotherapists. There are a number of part-time physiotherapy programmes in the UK, some of which have been set up primarily for physiotherapy assistants wishing to train as chartered physiotherapists. There are also a number of accelerated physiotherapy programmes in the UK offering licence to practice physiotherapy. Applicants who have already obtained an honours degree may be eligible to study for an accelerated pre-registration Masters degree programme.

Inter-Professional Learning

Interprofessional learning has been defined by the Centre for Advancement in Inter-professional Education (CAIPE) as:
'occasions when two or more professions learn from and about each other to improve collaboration and the quality of care'

(CAIPE 1997)

It is the view of the CSP that interprofessional learning should inform and enrich the experience of physiotherapy students without compromising their development of physiotherapy-specific knowledge, skills and attributes (CSP 2002a). Shared learning activities should prepare students for their future roles as key members of multi-professional health care teams and for practice in a wide range of settings. Physiotherapy students need also to develop a strong awareness of the roles of other health care professionals within the context of contemporary health and social care provision so that, on qualification, they

- Can understand individual and team working practices sufficiently to operate appropriately and effectively in both contexts.
- Are able to engage in inter-professional communication and collaboration to ensure services are delivered efficiently in the best interests of all users.

The type, scope and amount of inter-professional learning should fit with the philosophy of individual physiotherapy qualifying programmes, the profile of health care education provision within the host institution, and national and local initiatives to promote increased levels of inter-professional education and working (DoH 2000a, DoH 2000b NHS Executive 2001).

The DoH has called for education programmes to respond more readily and flexibly, in both classroom and practice settings, to support the multi-professional nature of modern health care provision. Four leading edge pilot sites

have been funded by the DoH to develop 'common learning', and physiotherapy is represented in all of them:

- Kings College London with Greenwich and South Bank Universities.
- Universities of Southampton and Portsmouth.
- Universities of Newcastle-upon-Tyne, Northumbria and Teesside.
- Universities of Sheffield and Sheffield Hallam.

Each site has its own distinctive approach to 'common learning'. In the London site, all undergraduate students of dentistry, dietetics, medicine, midwifery, nursing, pharmacy and physiotherapy participate in a 3-phase programme. The first year involves shared learning of communication skills and healthcare ethics. In their 'middle' (second or third) year students based in selected practice areas work together on scenarios of patients' problems to identify and explore the different components of treatment and care required. In their 'final' (third or fourth) year students based in practice placements work on guided problem-solving exercises in small groups of 4-10 students.

In Southampton/Portsmouth, an integrated curriculum has been developed across 11 professional programmes (audiology, medicine, midwifery, nursing, occupational therapy, pharmacy, physiotherapy, podiatry, diagnostic radiography, therapeutic radiography, and social work). Common learning takes place in both the university and practice settings, phased and placed across the duration of 3,4 and 5 year programmes.

The Sheffield 'common learning' project includes diagnostic radiography, nursing studies, occupational therapy, operating department practice, physiotherapy, radiotherapy and oncology, and social work studies. Three inter-professional placement pilot sites have been established where there are naturally occurring inter-professional teams, in order to optimise students'

section **six**

understanding and awareness of real world issues in the modern NHS. To support the initiative, new learning materials and e-learning modes of delivery are being developed to facilitate interactive communication between the university and placements.

In Newcastle, Northumbria and Teesside, the aim is to develop, implement and embed innovative inter-professional clinical placements, which promote collaborative pre-registration learning and working in health and social care in the North East of England. In pursuit of this aim the project objectives are:

- To map current pre-registration programmes of learning to identify areas where common learning could be developed

- to work with service colleagues and users to identify key outcomes for common learning programmes

- to scope the opportunities offered by curriculum renewal for the introduction of coordinated collaborative clinical placements shared by medical, nursing, physiotherapy, occupational therapy, speech and language therapy and social work students

- to develop and pilot a range of innovative placements and work-based assignments which promote collaborative practice between professions

Inter-professional learning is not confined only to the DoH funded sites. The questionnaire audit revealed that many institutions cover aspects of inter-professional learning, but in the majority of cases the context of learning is the classroom rather than the clinical setting. The most frequently mentioned topics for inter-professional learning were communication, professional practice, research methods, NHS issues/health policy, inter-professional working and professional roles, reflective practice, management, problem based learning, anatomy and physiology.

At the University of Ulster a new programme is underway whereby, in semester 2 of year 1, physiotherapy and occupational therapy students learn intensively together for an entire week, with no other timetabled sessions. The week is devoted to clinical preparation and various subjects are covered, such as moving and handling, cardiopulmonary resuscitation, cross-infection, documentation, assessment of clinical placement, roles of all involved, ethical and legal issues and codes of conduct.

Nature of Student Placements

Learning in practice settings

'Students should develop new knowledge and skills while in practice-based settings, in addition to applying, consolidating and reflecting on learning gained in the university environment. They should gain experience that enables them to develop, apply and reflect on their clinical practice across the core areas of contemporary physiotherapy practice (particularly the management of individuals with problems of the neuro-muscular, musculo-skeletal, cardio-vascular and respiratory systems) and to draw on, and review, the profession's evidence base. They should also be enabled to develop their understanding of the wide range of individuals who can benefit from physiotherapy and the diverse settings in which physiotherapy is delivered (including physiotherapists' roles in health education and promotion).'

(CSP 2002a).

The overall profile of students' practice experience should reflect an appropriate balance between placements in acute and primary settings, and the following are key areas in which students' learning should develop in practice:

- The ability to apply and adapt their clinical and social skills in different practice environments, taking account of the varying needs of individuals, groups and carers

- Their communication and teaching skills, including their ability to listen effectively, to address individuals' needs with sensitivity, to explain their thinking and action in appropriate styles and formats

- Their commitment to patient partnership, manifested in their sensitivity and responsiveness to the needs and interests of patients and carers through the negotiation and evaluation of mutually-agreed goals

- Their capacity to collaborate with other members of health care teams, including members of other professions and support workers, recognising and respecting the roles, responsibilities and contribution of each

- The ability to make independent decisions, based on a thorough evaluation of need, contextual factors and the best available evidence, while referring to appropriate sources of advice and support when needed

- The ability to manage a caseload effectively and efficiently in a range of settings, making appropriate decisions about priorities and drawing on sources of advice and support when needed

- The ability to keep full and accurate records, respecting issues of confidentiality, information security obligations and standards of professional practice, and responding appropriately to developments in ICT and knowledge management that impact on record-keeping processes and requirements

- Recognition and appropriate response to the limits of their personal scope of practice and to the scope of practice of the profession at large

- The ability to acknowledge and deal appropriately with uncertainty, unpredictability and change (both in terms of clinical practice itself and the organisational contexts in which physiotherapy is delivered).

(CSP 2002a).

The practice-based education component of the curriculum should be structured and designed to enable students to take responsibility for their personal learning and development, engage in reflective practice and nurture their commitment to Continued Professional Development (CPD). The settings within which physiotherapists practise are extending all the time, along with the role of rehabilitation within the modernisation of healthcare (CSP 2001, DoH 2000a, DoH, 2000b). It is therefore important that learning environments within practice-based settings should:

- Allow students to build on their previous clinical experiences and learning gained in the university setting

- Create opportunities for reflection and critical debate

- Assist students in integrating their university-based learning with their clinical experience

- Enable students to refine their thinking and practice (Hart & Ryan 2000).

Organisational Issues

Students need to complete substantial periods of practice-based learning within the core areas of physiotherapy practice (neuro-muscular, musculo-skeletal, cardio-vascular and respiratory) and within acute and primary care environments. Students' practice-based learning needs to be truly representative of current physiotherapy practice, enabling them to undertake assessment, initial intervention planning, implementation and evaluation in frequently encountered situations and settings. Wherever possible, students should gain work-based learning within the increasingly diverse environments in which physiotherapy is delivered outside the NHS (including independent hospitals, private practice, schools and industry) and be supported in developing appropriate self and practice management skills (CSP 2002a).

section **six**

Current debates

The physiotherapy profession is actively debating issues surrounding student placements. The demand for growth in the number of allied health professionals, announced in the NHS Plan (DoH 2000b), has led to an increase in student numbers in many Higher Education Institutions (HEIs). It was quoted in the physiotherapy press (Burr 2004) that the total number of first year physiotherapy students rose from 1,926 in 2000 to 2,633 in 2003, a rise of nearly 37%. 'Meeting the Challenge' (DoH 2000a) provided an agenda for modernising the allied health curriculum and funded 14 first wave sites to develop and pilot flexible pre-registration courses to accommodate the increase in numbers. However, the perceived pressure on an already stretched clinical placement resource (Walker 2001) has led to speculation that success in increasing numbers will depend not on the ability of HEIs to recruit extra students, but on their ability to access enough clinical placements to accommodate these students (Bennett 2003, Moore et al 2003).

Several factors may interact to produce the nationwide shortage of clinical placements within physiotherapy education. Baldry, Currens and Bithell (2000) suggest that it is not only the increase in student numbers, but also factors such as clinical physiotherapy staff recruitment and retention problems, funding inconsistencies, and the absence of formal relationships between universities and physiotherapy services, that combine to produce the shortfall. The clinical education debate on how to counteract the placement crisis seems to centre on three main issues, which are reflected in the physiotherapy press, the literature and the findings of the questionnaire audit:

- the requirement for specialist physiotherapy practice placements in defined areas.
- models of clinical supervision where physiotherapy practice educators are responsible for more than one student.
- the timing of physiotherapy placements within the curriculum and competition for placements in particular geographical areas.

The requirement for specialist practice placements in defined areas

As mentioned above, three core areas of practice are specified by the Chartered Society of Physiotherapy as essential fields of experience for pre-registration students: neuro-muscular, musculoskeletal; cardiovascular and respiratory. Students must be able to demonstrate evidence of competence in each area, conventionally through specific assessed placements. However, it is becoming increasingly difficult to obtain placements in these specific areas and examples of new innovative ways to enable students to demonstrate competence emerged from the questionnaire audit.

Manchester Metropolitan University (MMU) offers placements under the broad areas of musculoskeletal, medical/surgical (similar, but not identical, to the traditional respiratory placements), neurological and 'combined'. These are skills-based, rather than subject based placements. MMU 'combined' placements can cover areas such as mental health, women's health, paediatrics, oncology or domiciliary care. A 'Clinical Education Supplement' (2002) in Physiotherapy Frontline Magazine quoted MMU's clinical education co-ordinator as saying 'It's not about covering all the areas [available for combined placements], it's about learning transferable skills, the theory of lifelong learning'.

It is particularly difficult to access student placements in the cardiovascular and respiratory field. An initiative developed at Oxford Brookes University also featured in the clinical education supplement and was highlighted in the questionnaire audit. A 'respiratory portfolio' was developed at Oxford Brookes to provide an alternative approach to evidencing cardiorespiratory experience in whatever clinical situation students find themselves. For example a student on a neurological placement may treat someone with a stroke who also has a chest infection, and ordinarily the respiratory experience would not necessarily be acknowledged. The portfolio is used to demonstrate evidence of cardiorespiratory experience and the reasoning behind

treatment choice. It includes a form for clinical educators to sign when they have observed a student carrying out a skill safely and effectively. To accompany the forms, students complete a corresponding reflective statement, drawing on critical incidents experiences, to demonstrate the reasoning underpinning treatment choice and implementation. As part of the portfolio, students assess their perception of their confidence and competence in respiratory skills at the start of their clinical programme and then again after completing their placements. This provides a profile showing the areas of respiratory management they need to develop once they begin working.

Models of clinical supervision where physiotherapy practice educators are responsible for more than one student

There are different models of student supervision in operation across the UK and Ireland. Practice Educators may supervise one (1:1) or more than one (2/3/4:1) students in the course of a single placement. In the last decade a 1:1 model has predominated, but more recently there have been pilot schemes investigating models where multiple students are placed with one supervisor, e.g. 2:1, 3:1, 4:1, 3:2 and team models. An extensive project was commissioned and funded by South East London Education Consortium and South Essex Education and Training Purchasing Consortium which evaluated three placement models: the 2:1; split placement and whole team models (Baldry Currens 2000).

Sussex education consortium also commissioned a project in 2001 at the University of Brighton, which was highlighted in the questionnaire, to evaluate clinical educational models for occupational therapy and physiotherapy. The aim was to compare 1:1, 2:1 and 3:1 placement models. They found that peer support and peer learning was evident in both the 2:1 and 3:1 models, although overall the 2:1 placement model was the most successful (Moore et al 2003). This confirms the work of Baldry Currens and Bithell (2003), who found that clinical educators and students were positive about their experience with the 2:1 model. Moore et al

(2003) also found that practice educators believed student learning was enhanced because they discussed patients, practised techniques together, engaged in joint problem solving, observed each other with patients and provided feedback. Students were more confident and educators found the experience more rewarding.

The main perceived disadvantages of the 3:1 model was that there was less time available for the Practice Educator to spend with each individual student for observation and feedback. On some 3:1 placements there were not always enough patients for students to work with, space was sometimes difficult and students were less integrated into the department (Moore et al 2003).

The 2:1 model is being promoted by HEIs, to counteract placement shortages. Despite frequent initial resistance by clinical educators to having two students at the same time, the 2:1 model is gaining in popularity (Baldry Currens 2003). The strongest theoretical argument in favour of 2:1 models appears to be the opportunity for the two students to engage in peer learning, which has been shown to be effective in a variety of learning situations, including the clinical setting (Lincoln et al, 1997; Ladyshewsky, 2000). Following a review of evidence to underpin 2:1 models, Baldry Currens (2003) concluded that the advantages of the 2:1 model include reduced student dependency and increased time for the educator to supervise (because of delegation of caseload); whereas the disadvantages include that the educator needs to learn new strategies to facilitate learning and has to complete two sets of learning contracts and assessments.

The timing of physiotherapy placements within the curriculum and competition for placements in particular geographical areas.

The timing of placements within the curriculum is not specified by the CSP and there is wide variation across pre-registration courses. For example, some courses have placements in the first year, where students are assessed on professional core skills, such as communication or

moving and handling (e.g. Northumbria University, University of Ulster), prior to specific 'physiotherapy' practice placements in year 2. Other courses limit year 1 clinical placement to observation and orientation only. Curricula need to be increasingly flexible and, where possible, synchronised across professional courses, to accommodate practice-based inter-professional learning. Different timing of placements across different professions is a significant barrier to planning and implementing inter-professional learning programmes.

In the South of England there has been an innovative collaborative venture between 8 HEIs who would previously have been competing with each other for the same placements. This collaboration, known as the Physiotherapy Placement Integrated Management System (PPIMS) aims to centralise and optimise placement usage and its success was highlighted in several of the audit questionnaires. However, even with placement databases the pressure for placements remains great. The three physiotherapy education providers in the West Midlands worked closely to make the best use of existing placements, and reported sharing a clinical placement database (Clinical Education Supplement 2002). However, they still found it difficult to increase placement capacity, which would appear to be the case two years later, as responses from the questionnaire audit indicate that placement expansion remains very difficult and, in some areas, impossible. Some of the probable reasons behind the widespread failure to increase placement capacity were mentioned in the questionnaire, e.g. inconsistencies in payments to educators and lack of recognition of the practice based educator role, will be discussed in the following section.

Status of the Practice Educator

The CSP validation guidelines state that clinical education is the role of all clinical practitioners (CSP 2002c) and the CSP clinical education guidelines (CSP 2003) concur by stating that all members of the physiotherapy team may contribute to the clinical education of the student, but that the lead Practice Educator should meet certain specifications before being regarded as able to manage an effective placement. These are:

- Would have normally practised physiotherapy for at least two years

- Has undertaken regular updating of knowledge and skills

- Demonstrates a positive commitment to physiotherapy student education

- Conforms with the CSP Standards of Practice

(CSP 2000), (CSP 2003)

Some practice educators are paid an allowance for accepting physiotherapy students on placement and others are not. There are wide discrepancies at national, regional, local and Trust level, and practitioners have cited lack of financial reward as a barrier to increasing placement capacity (Maxwell 1995). Financial reward is only one element of recognition that practice educators seek. In a recent inter-professional conference (FDTL project UNN) three key issues emerged regarding recognition of the importance of the Practice Educator role: training and recognition of the educator; dedicated time allowance and resources for student supervision; and financial remuneration.

Preparation of Practice Educators

The questionnaire revealed that the content, duration and level of practice educator courses differed substantially across respondents. Table Two shows the range and frequency of topics covered in the courses. Issues around student assessment and learning were covered by the majority (more than 80%) of respondents, whereas subjects such as cultural diversity and consent were covered by less than one third.

Content	Frequency
Student Assessment	88
Monitoring student progress	86
Reflective practice	85
Learning styles	83
Learning Contracts	81
Roles, responsibilities and accountability	77
Programme planning	77
Mentoring	77
Teaching styles	77
Setting student tasks	71
Facilitation	69
Communication skills	66
Portfolios	65
Rules and Regulations	58
Confidentiality and ethics	56
Student Absence	56
Report writing	50
Coaching skills	48
Special needs	46
Health Professions Council	46
Mentor/educator absence	42
Assignment writing	40
Discipline	36
Legal requirements	35
Consent	35
Insurance issues	33
Counselling skills	31
Cultural diversity	31

Table Two: Content of practice educator courses

The CSP introduced the concept of the Accredited Clinical Educator (ACE), in recognition of the key influence of practice educators on the future of the profession and in an attempt to 'benchmark' practice educator preparation. The ACE scheme was piloted in 2003 and specifies six learning outcomes to be met by practice educators:

- Describe the role and identify the attributes of the effective clinical educator.

- Apply learning theories that are appropriate for adult and professional learners.

- Plan, implement and facilitate learning in the clinical setting.

- Apply sound principles and judgement in the assessment of performance in the clinical setting.

- Evaluate the learning experience.

- Reflect on experience and formulate action plans to improve future practice.

The new national scheme will offer clinical educators a choice of two routes to accreditation, built on the same six ACE learning outcomes. Prospective ACE practitioners will be able to choose to follow either a programme-based or taught course/modular route (which may also carry academic credit) or an experiential or profile (portfolio-based) route, linked to study sessions. HEIs assess achievement of the outcomes and, if successful, the newly accredited clinical educator is admitted to a CSP register for 5 years. It is proposed that the ACE scheme would be recognised by HEIs, clinicians and managers and will be launched in 2004. It will be voluntary rather than mandatory, with the aim of building on good practice. HEIs can thus put forward their clinical educator courses for ACE accreditation and individuals coming through them would achieve ACE recognition (programme route) or experienced educators may compile a profile of evidence to be individually assessed (experiential route).

section **six**

The questionnaire audit identified several examples of innovative practice in educator preparation. The PPIMS collaboration in the South of England designed a practice educator course, which all eight PPIMS universities deliver. Clinical educators may attend at a university of their choice, even if they do not usually take students from that institution. Similarly, MMU is working on a regional clinical educator accreditation scheme in partnership with Salford and Liverpool universities. Several universities mentioned that they offer Masters level modules in clinical/practice-based education. All modules mentioned were inter-professional in nature and, in some cases, could be accumulated with other modules to make up Masters Degrees. Teesside University presented its joint physiotherapy and occupational therapy course for clinical educators/practice educators/mentors at the meeting of the Clinical Education Co-ordinators Network Group (CSP 20th January 2004). The course uses innovative video clips of practice educator-student scenarios, which are relevant across both professional groups. Feedback from participants has been very favourable and other professional groups who have heard about the course have asked to enrol. The course developers hope to present the course for ACE recognition for physiotherapists.

Selection of Practice Educators

The questionnaire audit revealed consistency regarding selection of practice educators only in terms of two broad factors: completion of an 'in-house' practice educator course provided by the HEI and fulfilment of a certain amount of post-qualifying clinical experience. Although the ACE scheme now provides a minimum standard, it is unlikely that HEIs will insist on ACE recognition for all their practice based educators. As already stated, the scheme is voluntary and, given the scarcity of the placement resource, HEIs will be reluctant to enforce anything that may ultimately reduce this resource further. The required minimum length of experience of educators ranged from none specified, through 18 months, to 2 years. Some respondents specified that practice educators must be of a senior grade,

although this varied between Senior I and Senior II. Others stated that membership of the CSP and registration with the HPC were the only basic requirements for eligibility to supervise and educate physiotherapy students.

Student Preparation for Practice Placements

The curriculum framework (CSP 2002a) recommends a reciprocal relationship between the clinical and university settings and urges that strong links are made between theory and practice. Responses to the questionnaire audit indicated a range of methods of student preparation, as shown in Table Three. There seems to be considerable variation in the way students are prepared, ranging from dedicated accredited modules to individual sessions on topics such as health and safety or CPR. Most of the preparatory activities are undertaken on a uni-professional basis, although one inter-professional placement preparation module was mentioned. Examples of topics covered and preparatory activities are summarised in the table below. Methods of delivery mentioned were lectures, seminars, workshops, individual tutorials and information packages. Some sessions sit 'outside' modules of study, whereas others carry specific points. Duration of specific placement preparation activities ranged from individual tutorials to 3-week elective or induction programmes. Prior visits by students to placements were not routine. In some cases they 'always' happen, in other cases visits are not possible, or it is the student's choice whether or not to visit or telephone prior to arriving on placement. Induction arrangements were the responsibility of the practice educator and HEIs were 'hopeful' that induction arrangements were satisfactory.

Topics	Examples of preparatory activities
Practical skills	Moving & handling CPR Work as a physiotherapy assistant Infection control Nursing/ward experience
Knowledge	Health & safety issues Codes of conduct, e.g. confidentiality & consent Assessment process
Independent learning skills	How to set objectives & use learning agreements How to develop a portfolio
Attitudes and awareness	Inter-professional issues 3rd year students support 1st years Shadow week with junior physiotherapist Visit to wards
Information	Handbooks Study guides Placement information Assessment process Web-based information

Table Three: Topics covered in student preparation prior to clinical placement

Cultural and Disability Background of Students

Improving recruitment of ethnic minority groups into health care professions is a key strategy for making services effective, accessible and culturally sensitive (DoH 2000a, DoH 2000b). Only 16 of the 21 respondents to the questionnaire audit provided information about the ethnic/cultural background of their students. From the small amount of data obtained it would appear that physiotherapy courses are made up of predominately white students, with small numbers of students from other ethnic minority groups represented, as shown in Table Four.

Ethnic group	Total number of courses	Total number of students
Black African	7	10
Black Caribbean	2	3
Black Other	2	2
Indian	4	10
Pakistani	4	4
Bangladeshi	1	1
Chinese	2	2
Asian Other	4	5
Other	5	7

Table Four: Ethnic groups in pre-registration physiotherapy

The recruitment of students with disabilities is the responsibility of each individual HEI and physiotherapy courses must adhere to the individual university's equal opportunities policy, whilst carefully considering any risks there may be to students in participating in the educational programme. Under the Special Educational Needs and Disability Act (2001), HEIs are legally required to ensure students with disabilities have an equal opportunity to benefit from clinical placements. No reliable data on numbers of students with physical or learning disabilities was obtained from the questionnaire audit, although some courses stated they had recruited students with disabilities. At the University of West England, disability issues in clinical education are being tackled by developing a three year placement programme for students with disabilities, in order to forward plan and develop strategies to facilitate students' learning. Their university's view is that almost all students can have a successful placement if they are appropriately supported by the team i.e. managers, clinical educators and HEI staff. Each student is supported in an individual way so that his or her needs are met.

Student Status

It is the view of the CSP that, whilst students are supernumerary to employed health care teams, they should be properly included within teams with whom they are placed (with appropriate arrangements for their induction) to optimise the quality of their learning experience (CSP 2002a). The CSP Clinical Education Placement Guidelines, section 5 (CSP 2003) sets out student responsibilities and rights on placement, which are: the right to a negotiated learning agreement and a safe placement environment within which to work; and responsibility for complying with the Rules of Professional Conduct (CSP 2002b) and Standards of Physiotherapy Practice (CSP 2000). Clinical caseloads are allocated selectively by the Practice Educator, to best meet the learning objectives of the particular placement. However, in meeting these learning objectives, the practice educator needs to be sensitive to the individual needs of the student, for example their learning needs and their personal needs, which may encompass physical and emotional issues. The CSP is in the process of preparing a guidance document on supporting physiotherapy students on placement, which will address issues raised in the Special Educational Needs and Disability Act (2001).

Assessment of Practice Placements

The assessment of students' learning should be integral to the learning process (QAA 2001). Students should have opportunities to demonstrate their learning in a variety of ways and by assignments and examinations that have direct benefits for their learning. The approaches used should also provide students with regular and constructive feedback on their progress and performance, whilst encouraging self-directed learning and evaluation of personal achievements. The assessment strategy used within programmes should achieve the following:

- A combination of approaches that enable programme providers to test, and students to demonstrate, fulfilment of the curriculum framework outcomes;

- An appropriate balance between formative and summative assessment, ensuring students receive regular and in-depth feedback on their performance and progress and guidance on areas in which they need to develop their knowledge and skills further;

- Approaches that encourage and develop students' confidence to

  Assess their own learning through reflection and evaluation

  Identify areas and ways in which they want and need to develop further

  Make judgements about their own performance with some accuracy and without external or formal input;

- Explicit and detailed guidance (including the assessment criteria against which learning is to be measured) on what is expected of students in each element of the assessment process;

- A robust assessment of students' ability to practise safely and effectively in the core areas of physiotherapy practice and their preparedness for professional practice on initial qualification.

(CSP 2002a)

The questionnaire audit identified the development of a common assessment tool by the University of East London, University of Hertfordshire, Brunel University and, later, Colchester Institute (four of the HEI's comprising the PPIMs collaboration). The development was linked to guidelines for learning outcomes and assessment specified by the QAA and the CSP curriculum framework. Learning outcomes reflect students' level of learning for 4 key areas of practice namely:

- Interpersonal skills

- Professionalism

- Clinical reasoning

- Treatment management

There are two parts to the assessment tool: part 1 covers the areas of practice identified above and part 2 covers professional behaviour and safety. A learning contract and a section for students to reflect on their learning is incorporated within the form. The common assessment tool is now used by 8 of the 9 HEIs within the PPIMs group. An audit of the form has just been completed.

On-Going Support Systems

In the questionnaire responses the most frequently mentioned support system for educators was telephone contact, followed by visits from the HEI to the practice setting and formal scheduled meetings, including on-site workshops. E-mail contact was mentioned, although less frequently. Not all placement venues have access to IT support and e-mail, which clearly limits the development of electronic networks and collaborations. Offering a named contact in the HEI for each placement, issuing handbooks, documents and running study days were common practice and seen as useful support mechanisms. Monitoring by the HEI of placements and giving feedback to practice educators were also perceived to be important. Recent developments were mentioned, such as the development of practice placement facilitator (PPF) posts, although it is clear that the role and function of PPFs varies considerably between HEIs. For example, some PPFs work across more than one allied health profession and others are physiotherapy-specific. In some cases they have a role in student teaching, in others they are employed to scope for new placements and provide a link/liaison between the HEI and the practice setting. Other innovative methods of support were newsletters, support groups, a planned conference and investigation of what would be required to support practice educators if they were supervising 2 or 3 students at once.

Perceived Benefits/Limitations of Educating Students on Practice Placements

Respondents were asked to list up to three benefits and three problems that practice educators have brought to

their attention regarding supervising students on placements. The perceived benefits to practice educators of educating physiotherapy students in the practice setting centred around three main themes:

- continuing professional development (CPD),

- fulfilling professional responsibility,

- marketing their service to newly qualified staff of the future.

Within the theme of CPD, specific benefits mentioned were that students stimulate reflective practice, challenge assumptions, facilitate development of the educators' teaching skills and encourage evidence based practice and keeping up to date. Baldry Currens and Bithell (2000) found that, in general, students help to foster a 'learning environment' in the workplace and clinical educators surveyed by Bennett (2003) rated engagement in CPD as an important attribute of an educator. The HEIs who responded thought that practice educators enjoyed teaching students and found it a motivating experience to be able to 'give back' to the profession. Future recruitment of staff was perceived to be a tangible benefit to practice educators of taking students on placement, which mirrors the finding of Baldry Currens and Bithell (2000).

The perceived limitations or problems associated with taking physiotherapy students on placement were mainly associated with resource issues and student concerns. Lack of time was seen as a significant resource issue: time to get everything done; time to support students; and time management were frequently mentioned. Linked with time was workload, in that being responsible for a student on placement takes the practice educator away from his/her own caseload (Baldry Currens & Bithell 2000). When staffing levels are low there may be considerable personal costs to the Practice Educator of taking a student, including stress and loss of confidence. Lack of space was seen to be a significant resource constraint, which has been reported by Moore et al (2003), as was availability of

'suitable' patients for the student to treat. Student issues were perceived to be important in that problems associated with weaker or failing students, and those who were unprepared, unrealistic or unmotivated, challenged the ability of the practice educator to facilitate student learning and made their role more difficult.

Measures to Address Problems

Respondents were asked to suggest and rank measures to address the problems they perceived educators were experiencing, and Table Five summarises the responses. Support from the manager or immediate colleagues for 'time' out to work with the student and proper recognition/reward for the educator role were most frequently mentioned and ranked most highly.

Topics	First Ranked N = (3 points)	Second Ranked N = (2 points)	Third Ranked N = (1point)	Total Points
Support from manager/MDT, e.g. time out, acknowledgement of importance of student education	5		3	18
Recognition/reward for the educator role	2	2	2	12
Supporting/training from HEI	1	1	2	7
Increased staffing levels	2	1		7
Student issues, e.g. preparation time	1	2		7
Support	1	2		7
Assessment issues, e.g. common tool	2			6
Change model to reduce workload/be open to alternative approaches		2		4
Reduced/flexible workloads		2		4
HEI support student better	1			3
More space		1	1	3
Recognise students as valuable team members		1		2
Development of clinical education networks			1	1
Improved communication between placements and HEI			1	1
More clinical educators			1	1
More placement available			1	1
More student dedicated resources, e.g. IT			1	1
Localised placements			1	1

Table Five: Measures to address problems experienced by practice based educators

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Figure Two presents a model, which summarises the perceived needs of practice-based educators and how they could be addressed by support from the triad of manager, HEI and the immediate team. Recognition of the importance of student education and regard for the role of the practice educator emerge as important, not only from the questionnaire audit but also from the literature (Baldry Currens & Bithell 2000, Bennett 2003). Issues such as staffing levels and workloads have been recognised for some time (Maxwell 1995) and remain significant perceived barriers to increasing the quantity and quality of student placements
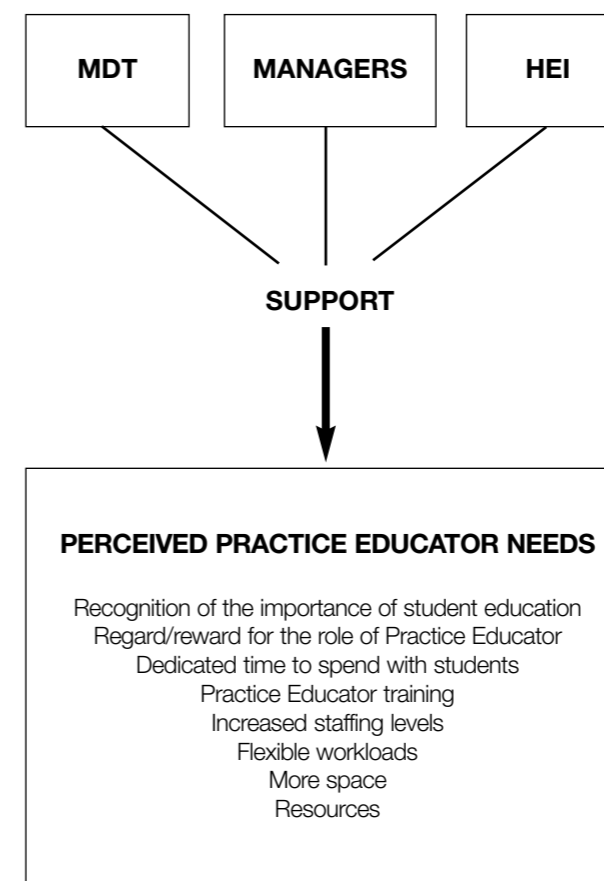
Figure Two: Model of support for perceived practice-based educator needs

Areas of Good Practice

Practice Educator Preparation

The preparation and training of practice educators is crucial to the success of clinical education in physiotherapy (Neville and French 1991, Cross 1992, Mbambo 1999, Baldry Currens and Bithell 2000) and clinical educators believe that proper recognition of their role could be achieved by University and Professional Body endorsement (Baldry Currens and Bithell 2000). Consequently a scheme for accreditation of clinical educators (ACE) has been launched by the CSP. Although there will be no requirement for educators to be accredited it is hoped that new initiatives will seek ACE recognition and that, in time, standards will rise. Many HEIs are already working to improve standards and to increase the 'pool' of trained educators.

There are examples in the South of England and the Midlands of innovative collaborations between HEIs to centralise and optimise placement resources and offer joint approaches to physiotherapy practice educator training. At Teesside University, physiotherapy and occupational therapy practice educators are brought together for preparation/training, with the aim of raising standards of clinical education and increasing consistency in quality of placement education. Although successful clinical educators need discipline-specific knowledge, they also require generic teaching skills and support from the HEI (Royle et al 1998), which, it could be argued, might be provided more effectively in a multidisciplinary, rather than uni-disciplinary context.

The 3-day course was designed to correspond to the ACE guidelines and carries 12 credits at level 6 for successful participants. It is assessed via a written portfolio and delivered using a variety of teaching and learning methods, including innovative use of video clips depicting student/educator scenarios in practice. The scenarios are applicable across different professional disciplines, as they address generic issues such as the 'failing' student. The potential benefits of interdisciplinary practice educator preparation requires further

section **six**

investigation, particularly given current initiatives in inter-professional learning in the workplace.

Inter-Professional Student Learning

A range of positive outcomes from pre-registration inter-professional education (IPE) has been demonstrated. IPE can help to modify negative professional stereotypes (Parsell et al 1998); improve students' awareness of the work of other professionals (Freeth & Chaput de Saintonage 2000, Gilbert et al 2000); enhance interprofessional communication (Edwards & Smith 1998, Lough et al 1996); and prepare students for interprofessional working (Harris et al 1998, Turner et al 2000). However, IPE at the pre-registration level is not well embedded across professions or across the higher education sector (Koppel et al 2001). Co-ordinating timetables within and between institutions, gathering together groups of equal numbers of students from different professions, securing joint validation and accreditation for modules and addressing cost implications are all important inhibitors to establishing pre-registration IPE (Reeves and Freeth 2002).

Nevertheless the Government has stated its intention to roll out successful IPE pilot initiatives after the completion of the previously mentioned Common Learning Projects. The four pilot sites are each taking a different approach and, whilst classroom based IPE forms part of some projects, it is the practice based IPE initiatives that are new and innovative. The local and national common learning evaluations may help to shape and determine the future of IPE in pre-registration education across physiotherapy and a range of other disciplines. Exploring different models of supervision on placement may be critical in facilitating large groups of students to be in the workplace together.

Models of Student Supervision

Traditional models of 1:1 supervisor to student ratio have predominated. However, in the last decade, there has been consideration of other models, where multiple students are placed with one supervisor, e.g. 2:1, 3:1, 4:1, 3:2 and team models. Centres of expertise emerge from the questionnaire audit, where HEIs such as the Universities of East London and Brighton have led research initiatives to test out different supervision models. Supervising more than one student may not appear immediately attractive to clinicians because of fears related to workload, pressure on physical resources, unavailability of patients or diluting of time per individual student (Triggs Nemshick and Shepard 1996, Huddlestone 1999, Baldry Currens and Bithell 2000, Moore et al 2003). However, after reviewing the literature, Baldry Currens (2003) recommends the application of the 2:1 model in physiotherapy, not only to help increase placement availability but also because of the growing body of evidence to support its effectiveness over the 1:1 model.

Evidencing Student Competence

The availability of placements in required specialist areas has been highlighted in this report as a challenge to HEIs when planning student experience. In particular, cardiorespiratory placements are very scarce. A 'respiratory portfolio' was developed at Oxford Brookes to provide an alternative approach to evidencing cardiorespiratory experience in a variety of clinical situations. The porfolio method, and the approach at MMU where student placements have been re-labelled as skills-based, rather than subject based, warrants further evaluation.

Rhetoric and Reality in the Preparation of Practice Based Educators

Clinical education in physiotherapy is at a critical point in terms of placement availability to meet the demands of growing student numbers, and training and preparation of practice based educators. The ACE scheme represents an opportunity to benchmark standards and set measurable criteria for becoming a practice based educator. However the scarcity of the placement resource is a disincentive to the CSP of making the scheme compulsory, for fear of educators opting out and withdrawing placements. Clinical Education Guidelines and DoH policy state that student

education should be everyone's responsibility in the work place, yet many senior physiotherapy practitioners refuse to accept students without extra payments. NHS Trusts have no obligation to provide placements for physiotherapy students and withdrawal of placements or refusal to offer additional provision is both a threat and a reality. Nevertheless this case study demonstrates that innovative ways are being found for managing these challenges. Some HEIs are collaborating with each other and the clinical sector to make the most effective use of the placement and practice based educator resource, and new and innovative ways are being found to prepare practice based educators for their role.

Conclusions and Recommendations

This case study has been written at a time of professional body reflection on the nature of clinical education in physiotherapy and the accreditation of practice-based educators. Current debates centre around the growing pressure on an already stretched placement resource caused by increasing student numbers. Three main concerns have been highlighted: difficulties in obtaining specialist placements; models of clinical supervision where practice-based educators take on more than one student; and competition for placements in adjoining geographical areas. Various innovative solutions to these problems are being developed and tested in practice, such as using portfolios to provide evidence of specialist practice across placements; 2:1 models of student supervision; and collaboration between neighbouring HEIs to share placement resources. These developments should be supported and further evaluated in practice.

The status and preparation of practice-based educators is currently under scrutiny and the newly launched ACE accreditation scheme offers opportunities for benchmarking standards and increasing the pool of qualified educators. The uptake of the scheme and the impact on practice-based education should be monitored and reviewed. HEIs and the practice environment face many challenges in providing appropriate learning experiences, particularly as physiotherapy moves increasingly towards primary care and inter-professional working. Many pre-registration physiotherapy courses are implementing classroom based inter-professional learning and, in some cases, this learning is extending into the clinical situation. Inter-professional student learning in practice will bring with it the need for focused preparation for educators, which could be tackled by multidisciplinary practice-based education models.

Many believe that practice based student education should be the responsibility of all physiotherapists, in order to safeguard the future of the profession. However, it remains at the discretion of individual Trusts, managers and clinicians whether or not to provide placements. Payment for taking students remains a highly contentious issue and disparities regarding financial remuneration need to be tackled in order to bring equity and consistency, and to safeguard the future of clinical education. Support in its widest sense appears to be the central factor in securing placement availability and attracting clinicians into practice-based education. Recognition of the importance of student education; reward/regard for the practice educator role; and workplace issues such as dedicated time for students and increased staffing levels are all perceived as important issues to be tackled. We propose a model in which managers, HEIs and the multidisciplinary team feature as key players in supporting practice-based educators.

section **six**

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section **six**

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