

Review

Healthcare practice placements: back to the drawing board?

Paul Millington, Lecturer in Physiotherapy, University of Bradford, Bradford, UK

Michael Richard Hellawell, Physiotherapy Professional Lead, University of Bradford, Bradford, UK

Claire Graham, Physiotherapy Programme Lead, University of Bradford, Bradford, UK

Lisa Edwards, Lecturer in Physiotherapy, University of Bradford, Bradford, UK

Email: p.millington1@bradford.ac.uk

## Abstract

**Background:** Sourcing healthcare practice placements continues to present a challenge for higher education institutions. Equally, the provision of clinical placements by healthcare providers is not at the forefront of their agenda. In view of this, the historic and traditional models of clinical placements is becoming more difficult to provide. In light of this, new models of clinical placements are being explored. **Aims:** This literature review explores the differing models of clinical placements in use and examines the merits and limitation of each. **Methods:** A mixed-methods literature review with a pragmatic approach has been used. **Findings:** Several placement models were described, including the traditional 1:1 model as well as 2:1, 3:1. The hub and spoke, capacity development facilitator, collaborative learning in practice and role emerging placement models were also discussed. **Conclusion:** There is a considerable paucity of high-quality evidence evaluating differing placement modules. Further research is required to evaluate the differing placement models from a students, clinical educators and service user's perspective.

Key Words: clinical education, collaborative learning, hub and spoke, practice placements models, role emerging placements

Practice placements are an integral part of the education of healthcare students. It is during placements that students have the opportunity to put theory into practice, experience the reality of working,

learn about professional values and beliefs as well as fulfilling statutory requirements. Clinical education is the arena in which students learn the 'norms', values, rules and loyalties within the profession as well as theoretical and practical skills (Laitinen-Väänänen et al, 2007). It has been recognised that developing practice-based learning opportunities is essential for the NHS as the best way the future workforce can be produced and sustained (Hellawell et al, 2018). Healthcare managers should be mindful that in the climate of increasing vacancy within the NHS that placement experience can play a part in addressing these issues. Often, the first destinations for employment are heavily influenced by a positive placement experience (Hellawell et al, 2018)

*'Widespread and growing staff shortages now risk becoming a national emergency and are symptomatic of a long-term failure in workforce planning, which has been exacerbated by the impact of Brexit and short-sighted immigration policies.'*

That is the Kings Fund (2018) assessment of the latest NHS Improvement's quarterly performance statistics regarding NHS vacancies (NHS Improvement, 2018). These concerns, regarding the issues of recruitment and retention of staff, have been described by NHS leaders as being as serious as concerns over funding (NHS Providers, 2017). This, coupled with the government's sustainability and transformational plans (STP's), in order to plan for the healthcare provision of the future and to meet a 'triple challenge' of better health, transformed quality of care delivery, and sustainable finances is essential. In conjunction with local NHS trust's drive to streamline services and meet their cost improvement plans current supply and demand of services is out of balance.

It is acknowledged by higher education institutions(HEI) that within the current NHS climate, placement provision may not always feel like a priority. Waiting list pressures, staff absence, vacant posts, maternity leave and the quality of care are often cited by NHS placement providers as reasons not to offer student placements. Although placement capacity remains a primary concern facing HEI's and healthcare providers, the quality of the practice placement is also crucially important.

It would be remiss to suggest there are issues everywhere with placement capacity, and there is an abundance of innovative work across all the healthcare professions, but it has been hypothesised that there is a link between student healthcare placement capacity and NHS workforce gaps (Hellawell et al, [2018](#)). Several articles concluded that an evidence-based approach is required to look at how best to increase practice placement capacity (Lekkas et al, 2007; Hellawell et al, 2018; Kyte et al, 2018). Perhaps, a new approach to practice education needs to be considered that meets the increasing number of training places announced (DOH, [2018](#)). This is not just in the best interests of higher education institutions, but the wider NHS too.

This mixed-methods literature review aims to explore clinical placement provision from across the globe within different areas of the healthcare sector. A mixed-methods approach is suggested as being effective at broadening the conceptualisation of evidence, is more methodologically inclusive and can produce an accessible synthesis of evidence (Sandelowski et al, [2012](#); The Joanna Briggs Institute Reviewers Manual, [2014](#)). It is a further aim of this review to provoke a conversation about challenging how practice placements are provided as well as exploring a wide range of possible placement models. It also aims to demonstrate how placement provision can evolve to meet the multilateral pressures in healthcare.

## Methodology

As there was a significant paucity of high-quality evidence on certain topic themes, a pragmatic approach was taken to support this review’s aim to discuss these novel and sometimes experimental models. Therefore, these single case studies, or expert opinions, were included despite them being lower in the methodological quality hierarchy (*Table 1*).

Table 1. Search strategy

Keywords	Databases searched	Dates
Clinical practice placements, placement models, training places, professional practice	AMED, CINAHL, MEDLINE, Science Direct	2000–2018

placement, placement pathways, practice learning, role emerging, education; collaborative learning	Appropriate grey literature sources	
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## Models of clinical placement

Given the breadth of healthcare professions, it is necessary to highlight that placement models can vary significantly depending on the profession. For example, large numbers of nursing students (up to 150 in some cases) can all begin placement simultaneously within the same organisation for up to 12 weeks (Nursing and Midwifery Council, [2011](#)). Whereas, other healthcare professionals may have much shorter placements.

Historically, the traditional model of clinical placement is that a student is supervised by a single mentor who would support and assess the students' performance. Given that placement capacity is in ever increasing demand, we have seen a shift in terms of the experience levels of the clinical mentor and the number of mentors who supervise a given student.

### **Traditional 1:1 vs peer assisted learning models (2:1, 3:1)**

A study of Irish occupational therapy students conducted by O'Connor et al (2012) examined the 2:1 vs 1:1 model from a student and clinical mentor's perspective. The findings demonstrated that the students preferred the 2:1 (two students to one educator) earlier in the placement because of the benefits of peer learning. However, they favoured 1:1 towards the end of the placement in order to demonstrate individual autonomy. Clinical Educators felt that although the 2:1 model offered greater learning experiences than 1:1 it presented organisational challenges. A study conducted by Martin et al ([2004](#)) compared the experiences of physiotherapy and occupational therapy students in the south of England from the perspectives of the clinical educator and the student with 1:1, 2:1 and 3:1 models. They found that there were significant advantages and disadvantages of the 1:1 model. The advantages from the students and educator's

perspective included: the opportunity to observe each other, building a relationship between student and educator, the student's integration into the department, ease in organising the student's time better, assessment of the student's strengths, weaknesses and progression. Some of the disadvantages from a student's perspective were lack of peer learning, fellow student company and someone to share ideas and discuss issues and challenges with. The clinical mentors identified that the reliance on them for all clinical support and advice was one of significant disadvantages of the 1:1 model.

Some of the themes identified when examining the 2:1 model was that students' felt more supported as they felt more comfortable, confident and less intimidated. However, the clinical educators and students felt that it was difficult to maintain the privacy of the student with this model. The clinical educators did find that teaching sessions were more rewarding and that demonstrating techniques was more easily facilitated. Both parties felt that learning was enhanced as students could practice techniques together, discuss and explore ideas with one another and exchange feedback. Students also felt they could ask each other questions they perceived to be 'silly' without fear of being judged. Both parties felt that students were more self-directed in their learning and motivated one another (Martin et al, [2004](#)). Martin et al, (2004) also discuss the principle advantages of the 3:1 model which were found to be social support and reassurance as well as someone to problem solve with. The disadvantages were: difficulty in monitoring an individual student's progress as well as keeping track of their strengths and weaknesses. The clinical educators felt that they had less time to spend with other members of staff which they considered to be isolating. Students were concerned that CEs would not be able to accurately assess them as well as the restricted number of patients available for them to see.

In summary, the literature albeit sparse indicates the 2:1 model being more favourable mainly because of the peer learning component as well as students feeling more comfortable and competent. Although this model presents significant advantages many clinical educators are weary of the organisational challenges conflicting with their already significant workload. It may be that the benefits of this model are not as well emphasised and the presumption that 'more students=more work' may be common place. Sevenhuysen et al ([2015](#)) also reported that peer assisted learning, which has been defined as 'the

acquisition of knowledge and skill through active helping and supporting among status equals or matched companions', helped to position students as active learners with a reduced reliance on the educator. They also concluded that peer assisted learning did not diminish the role of the educator but is rather central to designing flexible and meaningful learning experiences. Conversely, a randomised controlled trial conducted by Sevenhuysen et al ([2014](#)) concluded that students and educators were more satisfied with the traditional 1:1 model when compared to the peer assisted learning model – despite similar performance outcomes.

A systematic review of 61 studies evaluating physiotherapy placement models was conducted by Lekkas et al ([2007](#)) which evaluated six models of student physiotherapy placements including; one-educator-to-one-student (1:1); one-educator-to-multiple-students (1:2); multiple-educators-to-one-student (2:1); multiple educators-to-multiple-students (2:2); nondiscipline-specific-educator and student-as-educator through outcomes productivity; student assessment; and stakeholder views regarding advantages, disadvantages and recommendations for implementation. They concluded that no model was superior to another and there was no 'gold standard' model for clinical education. The notion that one model is superior to another is based on anecdotes and historical precedents rather than a meaningful, robust comparative studies.

A common theme in the literature was that a successful placement centred on it being wellplanned and that there were a sufficient number of patients available to the students.

### **Hub and spoke model**

The hub and spoke model refers to a bicomponent approach to placement provision, where a student is allocated to the primary 'hub' but will have the opportunity for secondary learning experiences ('spoke') related to the primary hub placement. These spokes may be anything from a single 'spoke' visit to a more prolonged period depending on the learning needs of the student (McCallum et al, [2014](#)). This model has been used within the nursing professional programmes for approximately 20 years and has been used to try to increase placement capacity (Roxburgh et al, [2012](#)).

A study of nursing students' experiences of this model was conducted by Thomas and Westwood (2016). This method of placement was found to enhance a student's understanding of the patient journey. Students obtained a wide breadth of transferable skills such as communication and adaptability when on this model. There were, however, some limitations to this model which include character differences and organisational problems mainly around the 'spoke' components. Moreover, the purpose of the spoke placement was not always apparent and often lacked appropriateness in relation to the students ongoing professional role.

The study by Roxburgh et al (2012) concluded that students had demonstrated an increased depth of learning which were achieved in two ways:

- a) The method in which hub placements are organised, managed and structured and,
- b) The depth of empathy and sensitivity to the individual at the centre of the care.

However they do suggest that students and mentors may have concerns that the individual students learning experiences may become narrowed (McCallum et al, 2014).

Although this model continues to increase in popularity within the nursing field, it is yet to be evaluated in numerous healthcare contexts. This model may pose issues for other disciplines as practice placements may be shorter in duration than nursing placements and organising the 'spoke' experiences could prove to be too time costly for practice educators. Despite this, there is significant merit to the patient-centred approach that it follows.

### **Capacity development facilitator model**

Placement capacity appears to challenge higher education institutions across the world, this is exemplified by an Australian study by Fairbrother et al, (2016) which has trialed a new model of clinical education to increase capacity and address workforce constraints and supervision.

The capacity development facilitator model described by Fairbrother et al (2016) aims to bridge the gap between theory and practice through a collaborative approach to clinical education by enhancing

student critical thinking, reflective practice and self-directedness as well as practical and clinical skills. A team approach is adopted so learning outcomes can be planned to meet educator, student and university needs (Fairbrother et al, 2016). This model of clinical placement can be incorporated into some preexisting models such as peer assisted learning and traditional models. The principle difference is the provision of an onsite facilitator from the university who works with clinical mentors and students to ensure promotion of teamwork and professional socialisation, mutual support, increased knowledge about appropriate learning strategies and improved organisational skills (Fairbrother et al, 2016).

Fairbrother et al (2016) preliminary findings suggest the capacity development facilitator model increases capacity, provides robust learning experiences, and satisfies the hospital, university staff and students. In conjunction with this, Dean and Levis (2016) aimed to establish the rationale for using a lecturer as a visiting tutor to support students on placement. They concluded that the support provided by the higher education institution, to enhance learning and assessment in the clinical environment, is an essential service that should be maintained. However, the value of the lecturer being there in person requires further exploration and other technological forms of non-face-to-face supports warrants further investigation.

### **Collaborative learning in practice placement**

Collaborative learning in practice placements originated in Amsterdam and has been adapted for use in the UK by nursing professionals. This model focuses on peer learning and has several stakeholders who include: the student, the clinical educator, the sign-off mentor (who is responsible for assessing and ratifying the students' competencies that contribute to ensuring suitable practice for entrance to the NMC register), the 'Coach' (who supports two or three students who is registered nurse and CM who are released from their clinical responsibilities on that day to support the students in planning and providing care and feedback on progress), and the 'Day Coach' (who is a registered nurse but is not necessarily a clinical mentor (Willis, 2015).

Within this model, students take responsibility for designated patients for all care delivery. All students are expected to work collaboratively – supporting and advising one another under the supervision of the ‘coach’ who coordinates, and delegates care to the students.

Initial evidence concludes that students take great responsibility for their learning and are more satisfied with clinical practice than those who undertake more traditional models (Hellström-Hyson et al, [2012](#)). Students who are coached rather than taught develop more enhanced clinical reasoning and decision-making skills (Secomb, [2008](#), Hellström-Hyson et al, [2012](#)). Interestingly, recruitment has increased in clinical areas where collaborative learning in practice placements is embedded (Lobo et al, [2014](#)). Moreover, ‘coaches’ and the clinical team reported greater job satisfaction and an increase in staff retention has been observed (Clarke et al, [2018](#)). Despite all the above benefits, levels of client or patient satisfaction have not been fully evaluated.

### **Student-led learning**

A study by Patterson et al ([2017](#)) explored the perspectives’ of Australian occupational therapy students on student-led groups in an inpatient brain injury rehab unit. In this model, students completed their placement in pairs or trios with one formal practice educator. Student responsibilities included: scheduling patients to attend the groups, planning group activities, participating in the groups, planning meetings with clinicians to determine participants to attend the groups, providing feedback to the treating clinicians (verbally and written). Students also provided a handover and orientation to new students commencing placement as there was a one week overlap between the groups of students. One of the main features of this placement model was that students would rely on each other for peer learning and work collaboratively to manage group programmes. Of the 15 students included in the study, some themes emerged from the data analysis. They found a good balance between the amount of support and freedom offered by the placement model; development of clinical skills such as clinical reasoning, communication, managing group dynamics and behavioural management. However, they missed opportunities of not conducting initial assessments and individual therapy sessions. It was emphasised that not all placement models can provide all experiences, and how the experiences this model offers can be generalised to other

settings and could assist with managing student expectations of the placement (Patterson et al, [2017](#)). The authors acknowledge that students continue to highly value the traditional 1:1 model of student placement but the overall positive student experiences and perceptions of this model justified its continued use in that clinical setting.

Kent et al ([2016](#)) investigated the perceptions' of 96 patients of an interprofessional student-led clinic in an elderly care setting delivered by 4<sup>th</sup> and 5<sup>th</sup> year Allied Health Professionals students in Australia. The clinic aimed to offer interprofessional education and delivery of patient care. Data was gathered between 2011 and 2013. The clinic's primary focus was to support older people who had recently been discharged from hospital. Student teams worked with patients to identify unmet healthcare needs and wrote referrals to various services. Legal advice had been sought for such a project and the clinic was limited to health 'screening' rather than student-delivered treatment. The results showed that significant 'new' health issues were identified by the clinic which and 120 referrals for additional services. The results also showed that patients knew more about how to reduce their healthcare problems and reported being able to cope with their health problems differently. Students also valued the opportunity to understand differing healthcare roles.

This model of student education can be beneficial for both student learning and service user satisfaction. However, it appears there is a theme from the student perspective that learning the fundamentals of individual patient care may be lacking and it may be costly to run. Despite this differing models of placement within the breadth of the placement portfolio may present new opportunities for learning experiences for students.

### **Role emerging placement model**

Role emerging placements can be defined as student placements in settings with no specific health professional role (Bossers et al, [1997](#)). They have gained increasing popularity particularly within the field of occupational therapy where most of the literature resides. There has been no published research to date exploring the use of role emerging placements in physiotherapy (Kyte et al, [2018](#)). The Chartered Society of

Physiotherapy has also emphasised the importance of adequately preparing graduates for new and emerging areas of practice (Chartered Society of Physiotherapy, 2018).

During a role-emerging placement, students explore the potential for, and establish and implement, an occupational therapy role. Cooper and Raine (2009) stated that the advantages of this placement model are: developing confidence in core skills, such as problem solving and the therapeutic use of activity, from more traditional settings. The student has to justify their clinical reasoning for interventions and to have ownership of practice in a way that might not be required in an established service (Fieldhouse and Fedden, 2009). Role-emerging placements also offer the host organisation many benefits. Students are often viewed as team members with additional skills, and organisations that are familiar with using short-term volunteers can recognise this opportunity (Cooper and Raine, 2009). One of the overarching challenges with role emerging placement is the student will academically and personally stretched in a way they may not be accustomed to which may be overwhelming initially. This presents a number of additional challenges in that these types of placements may not be suitable for all students. It could be that these placements are the reverse of the confident, assertive student with a clear understanding of the health professions' scope of practice and vision for the novel setting.

A study undertaken by Thew et al (2008) examined a small cohort of occupational therapy students via the means of placement evaluation questionnaires ( $n=17$ ) and through focus groups ( $n=10$ ). Most students rated the learning experience as 'very good' and only one student rated it as 'poor'. Some of the positive themes identified from this study were that students felt that it helped them to gain confidence in professional practice and would recommend it for future students. They also felt that they had the freedom to try new things and stimulated stringent clinical reasoning skills in order to define role to client group. However, some of the negative themes identified were negative attitudes about occupational therapy as a professional role and inconsistency in expectations of the students between university and educator.

## Conclusion

The principle advantages and disadvantages for the different placement models are summarised. The main potential advantages for the Educator: multiple student ratio model (2:1, 3:1) included increased independence and autonomy of students, greater learning experiences coupled with peer support and reduced anxiety for students. Teaching sessions were perceived to be more rewarding for clinical mentors due to the increased number of recipients which stimulates discussion and feedback. The potential disadvantages of this model is the perceived lack of individualised feedback from the clinical mentor to the student. The organisational challenges for the educator and the difficulty in maintaining privacy of students can also be potential disadvantages, along with difficulty in keeping track of individual students strengths, weaknesses and progression.

The Hub & Spoke model has a number of advantages which includes the student being able to follow the patients entire clinical journey through different services. As students progress from 'Hub' through different 'Spokes' they become more adaptable and improve their communication skills. As they are potentially able to follow a patient through their journey, they are able to have increased depth of empathy and sensitivity towards patients whose clinical pathway they are able to follow. The disadvantages of this model lay with the time taken to organise the different 'Spokes' for the clinical mentors. It could be perceived that individual student experiences may become narrowed and be less structured. Unfortunately not all clinical settings are suited to become 'Hubs'.

The CDF model's principle advantages are that there is the ability to increase placement capacity for HEIs and that the education for the students within this model is more of a team approach. This model facilitates the ability for university staff to become directly involved throughout the placement and the CDF is able to contribute to the teaching load. This model also enhances learning and assessment within the clinical environment. The disadvantages associated with this model are that it could be costly, time consuming and place increased reliance on university staff. The time taken to orientate the student to the placement can be significant. Clinical mentors report decrease patient caseload capacity than they would ordinarily.

The CLiPP model's main advantages are that it supports an interprofessional approach to patient care, increases student-led supportive environments during practice. A further advantage is the increase in ratio of students to clinical mentors, which may facilitate peer-assisted learning. There also has been reported increases in job satisfaction amongst clinical staff and observed increases in staff retention where this model has been employed. From a students perspective, they felt that this model prepared them well for practice. The main potential disadvantages are that the effects of this model on patient satisfaction has not yet been evaluated. As students arrive with differing levels of clinical exposure this can potentially disadvantage students who are less clinically experienced. Finally there was a perceived decrease in rapport between individual students and specific clinical mentors.

The newest placement model, the role emerging placement, is advantageous as it gives HEIs and clinical providers the freedom to explore new clinical areas, diversifying from more traditional settings. Role emerging placements allow the student to develop the confidence in core skills for example problem solving and clinical reasoning and thereby increasing student satisfaction with learning. Organisations who provide REPs may capitalise in the short term from temporary volunteers contributing to the workforce. The disadvantages are that REPs may lack structure and may overwhelm the less confident students. There may also be some disparity in expectation between the clinical mentor and university staff. Some negative attitudes were experienced in relation to the Occupational Therapy profession specifically, as the body of literature around REPs is mainly evaluated in this profession.

Despite the paucity of high-quality evidence evaluating different placement models the breadth of landscape for AHPs and nurses in the future remains ever-growing with the push towards advancing clinical practice and the development of roles traditionally undertaken by medical staff. This would seem like an opportunistic time to aim to get health student experiencing nontraditional models of practice placement so that the good work of AHP and nursing colleagues pushing the boundaries of the scope practice can continue. We would conclude that more work needs to be undertaken in evaluating these different models from multiple perspectives in terms of learning experience and ensuring they are fit for purpose in preparing

the healthcare students of tomorrow to be competent with the scope of today's practice but to push the boundaries of what could be achieved in the future.

### **Conflict of Interest**

The authors declare no conflict of interest

### **Ethical approval**

Ethical approval was not required for this literature review.

### **Key points**

- Sourcing clinical practice placements continues to challenge HEIs and healthcare providers spanning multiple disciplines in healthcare
- Capacity issues has required all stakeholders to consider different models of student placement
- Exploring this models has exposed new opportunities for learning when compared to the traditional practice placement model
- These new models however do present a number of limitations both professionally, academically and organisationally
- More research is required to robustly evaluate these placement models from the perspective of the student, educator and service user

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