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ILLUMINATING THE PROCESS: ENHANCING THE IMPACT OF CONTINUING PROFESSIONAL EDUCATION ON PRACTICE

INTRODUCTION

Changing demographic patterns of disease in countries across the world and the subsequent impact on health service delivery mean that pre-qualifying education can only ever be an initial preparation for healthcare professionals (HCPs). It cannot equip individuals for all the changes that will inevitably occur in a lifetime of professional practice.

The impact of global health trends (WHO, 2013), such as the rise in chronic and degenerative conditions and the growing threat of non-communicable diseases (Oxford Martin School, 2013), mean that effective continuing professional education (CPE)¹ is vital to enable HCPs to respond to the needs of contemporary health services. Working in increasingly complex and varied environments, it is essential that HCPs are appropriately educated and supported throughout their careers to develop the knowledge and skills to respond effectively to the needs of patients, service users and the wider public (Taylor et al., 2010). Recent healthcare reviews in the UK (such as Francis, 2013; Keogh, 2013) have revealed the devastating impact on patient care when healthcare systems and HCPs fail in their duty to maintain high standards of care.

In light of the complexity of 21st century healthcare services, there has been significant global investment in both pre-qualifying healthcare education and CPE to meet current and future needs (Mackinnon Partnership, 2007). The challenge, however, is to ensure this investment is spent wisely to up-skill and retain (Drey et al., 2009) both the current and future workforce.

While the effectiveness of CPE has been the subject of much enquiry (Lee, 2011; Tame, 2013), very little has explored the impact of CPE on practice (Hegney et al., 2010) and there is therefore insufficient convincing evidence to demonstrate that investment in CPE has a tangible impact on practice and patient care (Gijbels et al., 2010; Cotterill-Walker, 2012; Lahti et al., 2014).

This paper aims to contribute to this scant evidence base by examining the processes that key stakeholders – education providers, healthcare organisations, managers and learners –

¹ In this paper the term CPE is used to refer to post-registration education with an assessed component.

perceive to be most important in facilitating a positive impact of CPE on practice. It will focus on the particular contribution of educators and education providers.

BACKGROUND

Although the complexity of evaluating the effectiveness of CPE has long been discussed (see, for example, Eraut 1985; Goodall et al., 2005), there has been little significant progress to date in identifying measurements of effectiveness (Grant, 2011). The overall impact of CPE on practice therefore remains unclear (Cotterill-Walker, 2012; Lahti et al., 2014).

This lack of evidence sits uneasily in international outcomes-driven cultures that demand evidence-informed practice, quality and effectiveness. There is therefore an imperative to demonstrate benefit from investment in CPE (Wright, 2009). For example, in England the Educational Outcomes Framework (DoH, 2012) places a clear emphasis on establishing a direct relationship between education and improvements in patient care. Research that has been done on impact similarly reflects this emphasis on outcomes (Ellis and Nolan, 2005) and yet the tangible outcomes of CPE have proved difficult to measure.

Challenges to the measurement of effectiveness are compounded by the desire to generate 'strong' evidence – conventionally considered to be derived from systematic reviews of multiple, well-designed, large-scale randomised controlled trials (RCTs). While RCTs have a central position in the evidence-based practice movement, their ability to investigate complex interventions meaningfully has been questioned (see, for example, Greenhalgh et al., 2003; Seers, 2007; Mackenzie et al., 2010). In the complex and messy, real world of practice (Ellis and Nolan, 2005), where resources are scarce and confounding variables are difficult to control, experimental/quasi-experimental research is unable to attribute a clear-cut, causal relationship between CPE and practice. Indeed, the impossibility of identifying all the relevant components of an educational intervention means that RCTs have rarely been used to evaluate the effectiveness of healthcare education.

To date therefore, the impact of CPE has been evaluated mainly from the student perspective, and has relied on self-report data often from a single cohort of students, following a single course in a single education institution (Gijbels et al., 2010). While students may report benefits in terms of changes in attitudes and enhanced knowledge and skills, there is little reference made to developments in practice, organisational change or improved patient care (Gijbels et al., 2010; Hegney et al., 2010).

In summary, whilst the importance of evaluating the effectiveness of CPE is clear, the existing literature highlights considerable methodological and conceptual challenges (Hegney et al., 2010).

Developing a preliminary impact on practice framework

Our earlier work in this area (see, for example, Draper and Clark, 2006 and 2007) was motivated by a real desire to advance understanding of this whole issue. The first phase of this work (2006–2008) set out to develop a tool or framework to assist key stakeholders to demonstrate the impact of CPE on practice. Clinical managers told us they needed an approach that was generalizable – irrespective of course of study and setting – and were clear that using systematic research to evaluate specific courses was neither feasible nor sustainable. Our aim therefore was to develop a framework that was user-friendly and potentially applicable to a range of settings. The development of the framework (see Figure 1) was informed by an expert advisory group; a search of the health and social care, education and management literature; interactive conference sessions with peers (Draper et al., 2007; Clark et al., 2008); and structured conversations with key experts and stakeholders.

[Insert Figure 1 here]

The Impact on Practice (ImP) framework captures a temporal dimension of before, during and after participating in CPE, and is structured in four domains corresponding to the key stakeholders:

- The individual learner – qualified nurses undertaking CPE (referred to as ‘students’ in this paper)
- The manager of the student in the clinical setting
- The education provider – the university delivering the CPE
- The healthcare organisation – the hospital or community organisation in which the student works.

Within each of the time-frames in each domain, a number of factors were identified from the literature that may influence how the impact of CPE on practice can be enhanced.

Having developed the ImP framework, our original intention was then to evaluate its implementation across a range of organisations. However, as we reflected on how this

might be achieved, it became clear to us that the *processes* affecting how CPE was planned, delivered, engaged in and applied to practice were fundamental in influencing the overall impact of CPE on practice. These included, for example, the importance of organisational context, the influence of the manager in the development of practice, and the importance of strong relationships between education and practice. Given the importance of these 'process' issues we debated whether it would be appropriate, or even possible, to evaluate the framework within an evaluation paradigm that focussed strongly on outcomes. We concluded that insight into the *processes* of the real world of the key stakeholders would achieve a better understanding of how to improve the impact of CPE on practice. Our view was that if account were not taken of *process* – of the culture, values, attitudes and behaviours of the key stakeholders involved in CPE – any attempt to evaluate outcomes would be fruitless.

The second phase of the study therefore changed to reflect this shift in focus from outcome to process and set out to explore the processes that key stakeholders believe are the most important in facilitating a positive impact of CPE on practice.

METHOD

Study design

The second phase (2009 onwards) was undertaken in one region of England. Two of three acute healthcare organisations and one of two primary healthcare organisations in the region agreed to take part, as did both the universities providing CPE for these organisations. Representatives of the four stakeholder groups – students, managers, educators and members of each healthcare organisation's governing board – were invited to participate.

Semi-structured interview schedules were developed to explore the factors that the different stakeholders perceived to affect the processes influencing the impact of CPE on practice. Interviews were predominantly by telephone to accommodate geographical spread and a small number were face to face. All interviews were recorded and transcribed. Two interviews, separated by approximately six months, were conducted with as many of the original participants as possible: 35 were conducted in the first round of interviews and 31 in the second round.

Educators in participating universities and managers in healthcare organisations contacted students to invite their participation. The original intention had been to interview managers of the post-qualifying students who had agreed to participate, but several students were

reluctant to agree to this. The decision was therefore taken to recruit additional managers who were not line-managing participating students. Interviews often had to be rescheduled at short notice due to clinical demands.

Ethics

The study was regarded as an evaluation, not research, so NHS research ethics approval was not required. Consent was provided by the relevant geographical Research Governance Committee, the individual service departments involved and The Open University.

A consent form and information sheet was provided to all participants. Ethical considerations of informed consent, anonymity and confidentiality were upheld throughout the study, and data protection protocols adhered to.

Data analysis

An iterative process of data analysis was undertaken with a preliminary analysis of the transcripts using NVivo (a qualitative data analysis computer software package) to identify emerging themes. The transcripts and emerging themes were further explored, using template analysis (King, 2012), a technique for organising and analysing qualitative data. It balances a relatively high degree of analytical structure with the flexibility to adapt the analysis to the needs of a particular study. It involves the development of a list of codes (the coding template) which summarises the themes identified by the researchers and organises them in a meaningful manner. Hierarchical coding is emphasised, with broad themes and narrower, more specific themes being identified as necessary. According to King (2012), the approach is particularly suitable for studies that 'seek to examine the perspectives of different groups within an organisational context' (p.447).

The interview transcripts were read and coded, templates developed with broad and narrower themes identified for each group of stakeholders, and then discussed and agreed by the research team. From the analysis of the data from each of the stakeholder groups, four overarching themes were identified.

FINDINGS

The four themes, outlined below, illuminate stakeholders' views about the issues affecting the process of CPE and contribute to our understanding of the factors that influence the impact of CPE on practice.

Organisational culture

All stakeholders highlighted the importance of a positive, supportive organisational culture in maximising the impact of CPE. A strategic commitment to CPE at institutional level in healthcare organisations was recognised by managers and students as crucial in establishing an ethos where both organisational and individual needs come together. Personal development plans and training needs analyses were regarded as mechanisms to align individual and organisational needs.

It was recognised that organisational priorities should be supported by planned rather than *ad hoc* CPE to ensure that staff had the appropriate knowledge and skills to meet the organisation's strategic objectives.

A purposeful and considered approach to CPE can be reinforced at unit level by a managerial commitment to create a positive culture, and the role of the manager was considered key to this. As one educator commented:

'You can develop all these things and put together these really good ideas ... but it is up to the individual managers. ... the cultures in individual units will allow these things to flourish or not ... I think managers do have a very big part to play.'
[Educator 7/1]

Organisational cultures are markedly different between education and service, and educators recognised the need to understand the 'world' in which their students were working and in which they would be applying their new knowledge and skills.

Partnership working

All stakeholders stressed the importance of partnership working. Partnerships were seen as particularly important between educators, who were key to developing and delivering relevant CPE, and managers who played a key role in sponsoring and supporting their staff. The integration of service needs, education commissioning and the availability of relevant courses was regarded as essential for CPE to contribute to improved practice.

While effective communication and collaborative working between managers and educators was seen as essential, some educators noted that time and limited opportunities sometimes worked against this, even when there was a genuine commitment to do so. Managers, on the other hand, felt they did not always have access to sufficient, timely information about the CPE undertaken by their staff. Consequently, managers were concerned that they were

not able to support their colleagues' learning adequately. Students also reported they did not always receive adequate notification of the timing of study days and other course commitments and requirements. This could create difficulties for both them and their clinical colleagues.

Course evaluation was seen as a potential, important opportunity for further partnership working so that managers, students and educators could gain a greater understanding of each other's perspectives in order to build a solid basis for future partnership working. However, many managers indicated that they were not regularly involved in evaluation and, indeed, some were unaware of how and when evaluation was undertaken. Some educators shared this frustration and genuinely wanted to engage with clinical colleagues so that their input could be incorporated into the evaluation process.

There was a definite sense that collaboration between service organisations and education providers could be improved. However it was acknowledged that differences in culture between the worlds of service and education could militate against successful collaboration. Educators and managers often had different agendas and expectations. One such challenge was the intrinsic clash between the timescales within which service and education work. It could take several months for universities to develop a course and to secure regulatory body and/or academic approval. These timescales did not always meet service provider needs. Educators acknowledged this challenge and several had made strenuous efforts to respond promptly to service requirements by establishing regular meetings with service partners.

A supportive learning environment

All stakeholders acknowledged the importance of, and challenges associated with, creating and maintaining a supportive learning environment. Managers identified their greatest difficulty was providing support in the context of the demands of a busy workplace setting. Whilst acknowledging the helpful contribution of work-based supervisors/mentors/critical friends, managers often felt weighed down by clinical priorities and unable therefore to provide the necessary support:

'Sometimes we are all guns a blazing ... we don't give the student enough support ... I think that it is crucial that there is a system in place to support that person.' [Manager 7/1]

Stakeholders also recognised that students often faced a number of inherent challenges; for example, they had to combine a demanding clinical role with their studies:

‘... wherever they are working, patient care is very complex so they are often dealing with a very busy caseload ... post-reg. students are in very specialised or high-level jobs ...’ [Educator 10/2]

Students highlighted problems related to juggling learning and working, combining a demanding job and their studies, as well as coping with life events. This could be further compounded by a lack of clarity about course requirements, content and academic levels. In addition, some students felt ill-prepared for the demands of their studies. Some had had long breaks from studying, whilst others lacked relevant information technology (IT) skills and/or access to IT. Increasing use of online/blended learning and electronic media by education providers meant that some staff felt disadvantaged because of their limited skills.

In addition, students commented on the inflexibility of the education system in relation to attendance and assessment deadlines, given the competing demands of their clinical responsibilities. More positively, students appreciated the use of learning contracts, reflection as a method of learning and they valued group work. They found it helpful to talk with others (‘fellow sufferers’) who had previously completed the same or similar studies.

Educators acknowledged their responsibility to support students whilst recognising that time and competing demands were sometimes inherent obstacles to successful study:

‘There is a real juggling of work ... family ... health-related stuff, family bereavement, sudden cataclysmic service changes and reorganisation. All of that means that even the most resilient person is going to find it difficult to achieve academic attainment.’
[Educator 10/2]

Changing practice

The fourth theme relates to the over-riding purpose of CPE which is to improve practice by developing knowledge and skills. Both students and managers recognised their role in sharing knowledge for the benefit of patients/service users and the wider healthcare service, but identified difficulties in achieving this goal.

Students pointed to a shortage of time to share their knowledge – their busy clinical responsibilities frequently militated against this. Several highlighted there was little organisational expectation, and hence personal motivation, that they should apply their new

learning to practice, as well as a lack of infrastructure to support shared learning. However, others described the positive impacts of CPE, seeing it as ‘life changing’ and were inspired to try to change their practice as a result.

While some students aspired to be change agents, organisational structures often prevented them; they felt they had limited autonomy to initiate and sustain change. This was often compounded by cultural differences between units within the same organisation. As one manager observed:

‘We get them onto courses, we support them ... and hopefully they will come out shining the other side. Then it all goes quiet. So we expect them to apply their knowledge, but we don’t follow it up really.’ [Manager 10/1]

It was acknowledged that some of these challenges could be alleviated if there was a critical mass of individuals with the opportunity to network, share ideas about changing practice and become ‘champions’. However, the opportunity to create such a community of practice was often missed, due to a lack of adequate and established mechanisms to encourage and facilitate sharing.

Promoting the integration of knowledge into practice was also recognised as a responsibility of educators through developing curricula that addressed the priorities of practice. In addition to course content, collaboratively developed assessment approaches, such as service improvement projects, can result in changes that are more likely to become embedded into the practice setting.

DISCUSSION

This study revealed rich insights into the perspectives of four groups of key stakeholders regarding the processes that facilitate the positive impact of CPE on practice. From these insights a number of key facilitators and inhibitors were identified. When absent, facilitators can become inhibiting factors but the study also highlighted some additional ‘stand-alone’ inhibitors (see Table 1).

[Insert Table 1 here]

Drawing on these facilitators and inhibitors, and the wider literature as appropriate, the discussion below highlights three key issues at the heart of enhancing the impact of CPE on practice.

Organisational cultures

It is recognised that there is often a lack of integration between practice and academia (Allan and Smith, 2010). To overcome this 'disconnection' it is imperative that all stakeholders have insight into each other's cultures and the challenges they each face. This understanding is the foundation for genuine and meaningful collaboration.

Educators need to understand the culture of the clinical environment in which students work and how this impacts on their ability to put their new knowledge and skills into practice. When undertaking CPE, nurses are time poor (Hegney et al., 2010) as they balance busy clinical roles and family/caring responsibilities with the demands of study (Essa et al., 2011; Baxter et al., 2013). Many give of their own time and money (Tame, 2011) and this commitment to CPE is frequently unacknowledged (Gould et al., 2007). They may also not have the support of their manager and/or organisation. It is important that educators are reminded of the commitment and sacrifices students frequently make in order to undertake CPE. Similarly it is important that service colleagues have an appreciation of the cultures of 'the academy' and the demands and expectations educators face in relation to learning and teaching and research.

Learning environments

In the context of CPE, learning takes place in the university and workplace and fostering creative learning environments in both settings is integral to promoting the impact of learning on practice.

Employers are integral to creating a positive practice learning environment and facilitating and supporting CPE (Munro, 2008; Tame, 2013; Gorranos and Newton, 2014) and in ensuring students succeed (Essa, 2011). However, it has been long acknowledged that clinical learning environments are not always conducive to learning (Tame, 2011). Commitment to creating a positive learning environment should be demonstrated at all levels in a healthcare organisation. At a strategic level this means ensuring organisational priorities for development are aligned to individual development plans (Munro, 2008; Hegney et al., 2010) to resolve any tension between individual personal ambitions and employer demands (Munro, 2008). If individual and corporate needs are not aligned individuals may pursue their own 'covert and hidden' CPE – what Tame (2011) called 'secret study' – which in turn is likely to reduce the impact of learning on practice (Tame, 2011). Fostering an environment in which CPE can flourish also contributes to retaining staff and increasing job satisfaction (Grey et al., 2009; Gorranos and Newton, 2014).

Managers are crucial to creating a supportive learning environment in practice (Hegney et al., 2010; Pennbrant et al., 2013) and for creating ‘an organisation that endorses learning’ (Gorranos and Newton, 2014, p.659) where the workplace is both a site of work and a site of learning (Gorranos and Newton, 2014). There is also some evidence that managers can act as gatekeepers both with respect to access to CPE and how new knowledge and skills are implemented (or not) in practice (Gould et al., 2007; Tame, 2011). This might be because of professional jealousy (Tame, 2011) or feeling threatened (Gould et al., 2007). Managers’ leadership is therefore vital in cultivating an environment where CPE and its impact on practice are valued and prioritised.

Healthcare educators clearly have a role in promoting effective learning in the university setting but it is also important that they understand the ways in which students learn in their workplace settings. Allen and Smith (2010) argue that learning in practice is not merely about the transfer of knowledge from one setting to another (that is from theory into practice) but that it is ‘actively constructed and reshaped into personal meaning for each student’ (p.478). Theoretical knowledge has to be re-evaluated and recontextualised in practice (Pennbrant et al., 2013). Beyond ensuring that courses meet the needs of clinical practice (Gould et al., 2007; Pennbrant et al., 2013), the question for nurse educators then becomes, how best can we enable this recontextualisation of knowledge?

Drawing on the findings of the study, Table 2 highlights some of the ways in which nurse educators can enhance the impact of CPE on practice through course design, delivery and evaluation.

[Insert Table 2 here]

Partnerships

Much of the above might seem rather obvious and like ‘motherhood and apple pie’. However, the study findings suggest this is not necessarily the case. Achieving a greater appreciation of the different cultures of education and service, securing effective learning environments and implementing the facilitators outlined in Table 1, will not be realised without greater partnership working between education providers, service providers and students. Maximising the impact of CPE on practice is a *shared responsibility* and partnership working is the golden thread.

CONCLUSION

This paper has suggested, in the context of maximising the impact of CPE on practice, that the current emphasis on evaluating *outcomes* has overlooked the importance of those underlying *processes* that are essential to the achievement of good outcomes. Our contention is that an understanding of the processes that facilitate effective CPE is a crucial first step before it is possible to evaluate outcomes meaningfully.

Our study suggests that the following are central to establishing a culture and context where CPE can thrive and exert a positive influence on improving patient/service user experience and care:

- a positive organisational culture;
- effective partnership working between key stakeholders with an understanding of each other's perspectives, aspirations and constraints; and
- a supportive learning environment in both practice and education settings.

The imperative is as great as ever to prioritise these issues in order to eliminate what might otherwise be regarded as the 'lost benefits' of practitioners who have invested valuable time, energy and resources to enhance their knowledge and skills, and who are not always making best use of their learning in their workplace. This is also important in overcoming what might be considered the negative impacts or unintended consequences of CPD such as feeling pressurised into doing CPE or the resentment associated with doing it in their own time and with their own money (Gould et al., 2007). Senge, who originally put forward the concept of a 'learning organisation' in 1990, claims that organisations that will 'truly excel in the future will be the organizations that discover how to tap people's commitment and capacity to learn at all levels in an organization' (Senge, 2006, p.4).

Never has there been a greater need to capitalise on the accumulated intellectual capital and expertise developed through CPE to enhance organisational performance, particularly with the current emphasis in the UK on quality, innovation, patient safety and productivity against a background of demands for best value for money from all public funding.

At the outset of this study we assumed that educators had the lead responsibility for designing, delivering and evaluating CPE that would make a difference to practice. The study findings have revealed that this presumption was misplaced: educators are not alone in being responsible for delivering and demonstrating a return on CPE but rather each stakeholder has a key role to play. It is vital that all stakeholders understand the

perspectives, responsibilities and constraints of the others. If each stakeholder sees CPE through the lens of other stakeholders they will be able to work more effectively in partnership to deliver CPE that makes a real difference to the quality of practice.

REFERENCES

- Allen, H.T. and Smith, P., 2010. Are pedagogies used in nurse education research evident in practice? *Nurse Education Today* 30 (5), 476–479.
- Baxter, P., DiCenso, A., Donald, F., Martin-Misener, R., Opsteen, J., Chambers, T., 2013. Continuing education for primary health care nurse practitioners in Ontario, Canada. *Nurse Education Today* 33 (4), 353–357.
- Clark, E., Draper, J., Sparrow, S., 2008. The Impact on Practice (ImP) Project: A Project to Develop a Framework to Evaluate the Impact of Continuing Professional Education on Practice, *Nurse Education Tomorrow Conference*, 2–4 September, Cambridge.
- Cotterill-Walker, S.M., 2012. Where is the evidence that master's level nursing education makes a difference to patient care? A literature review. *Nurse Education Today* 32 (1), 57–64.
- Department of Health, 2012. *Liberating the NHS: Developing the Healthcare Workforce. From Design to Delivery*. Department of Health, London.
- Draper, J. and Clark, E., 2006. The impact of continuing professional education on professional practice: A call for urgent action. *NET/NEP 1st Nurse Education International Conference*, 14–16 May, Vancouver, Canada.
- Draper, J. and Clark, E., 2007. Evaluating the impact of continuing professional education on healthcare practice: The rhetoric and the reality [Editorial]. *Nurse Education Today* 27 (6), 515–17.
- Draper, J., Clark, E. and Attree, M., 2007. Evaluating the impact of healthcare education: Approaches and challenges. *Symposium at the RCN International Nursing Research Conference*, 1–4 May, University of Dundee, UK.
- Drey, N., Gould, D., Allen, T., 2009. The relationship between continuing professional education and commitment to nursing. *Nurse Education Today* 29 (7), 740–745.
- Ellis, L., Nolan, M., 2005. Illuminating continuing professional education: unpacking the black box. *International Journal of Nursing Studies* 42 (1), 97–106.
- Eraut, M., 1985. Knowledge creation and knowledge use in professional contexts. *Studies in Higher Education* 10 (2), 117–133.
- Essa, I., 2011. Reflecting on some of the challenges facing postgraduate nursing education in South Africa. *Nurse Education Today* 31 (3), 253–258.
- Francis, R., 2013. *Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry, Vol. 1: Analysis of Evidence and Lessons Learned Part 1 (HC 898-I) and Vol. 2: Analysis of Evidence and Lessons Learned Part 2 (HC 898-II)*. The Stationery Office, London.
- Gijbels, H., O'Connell, R., Dalton-O'Connor, C., O'Donovan, M., 2010. A systematic review evaluating the impact of post-registration nursing and midwifery education on practice. *Nurse Education in Practice* 10 (2), 64–69.
- Goodall, J., Day, C., Lindsay, G., Muijs, D., Harris, A., (2005) *Evaluating the Impact of Continuing Professional Development (Research Report No. 659)*. Department for Education and Skills, London.
- Gould, D., Drey, N., Berridge, E-J., 2007. Nurses' experiences of continuing professional development. *Nurse Education Today* 27 (6), 602–609.
- Govranos, M. and Newton, J.M., 2014. Exploring ward nurses' perceptions of continuing education in clinical settings. *Nurse Education Today* 34 (4), 655–660.
- Grant, J., 2011. *The Good CPD Guide: A Practical Guide to Managed Continuing Professional Development in Medicine (2nd edn)*. The Open University Centre for Education in Medicine, Milton Keynes.

- Greenhalgh, T., Toon, P., Russell, J., Wong, G., Plumb, L., Macfarlane, F., 2003. Transferability of principles of evidence based medicine to improve educational quality: systematic review and case study of an online course in primary health care. *British Medical Journal* 326 (7381), 142–145.
- Hegney, D., Tuckett, A., Parker, D., Robert, E., 2010. Access to and support for continuing professional education amongst Queensland nurses: 2004 and 2007. *Nurse Education Today* 30 (2), 142–149.
- Keogh, B., (2013) Review into the Quality of Care and Treatment Provided by 14 Hospital Trusts in England: Overview Report, NHS England, London.
- King, N., 2012. Doing template analysis. In: Symon, G., Cassell, C. (Eds), *Qualitative Organizational Research: Core Methods and Current Challenges*. Sage, London, pp. 426–450.
- Lahti, M., Kontio, R., Pitkanen, A., Valimaki, M., 2014. Knowledge transfer from an e-learning course to clinical practice. *Nurse Education Today* 34 (5), 842–847.
- Lee, N-J., 2011. An evaluation of CPD learning and impact upon positive practice change. *Nurse Education Today* 31 (4), 390–395.
- Mackenzie, M., O'Donnell, C., Halliday, E., Sridharan, S., Platt, S., 2010. Evaluating complex interventions: one size does not fit all. *British Medical Journal* 340 (7743), 401–403.
- Mackinnon Partnership, 2007. *A Literature Review of the Relationship Between Quality Healthcare Education and Quality of Care: A Report to Skills for Health*. The MacKinnon Partnership, Middlesex.
- Munro, K.M., 2008. Continuing professional development and the charity paradigm: Interrelated individual, collective and organisational issues about continuing professional development. *Nurse Education Today* 28 (8), 953–961.
- Oxford Martin School, 2013. *Now for the long term. The report of the Oxford Martin Commission for Future Generations.*, Oxford Martin School, University of Oxford.
- Pennbrant, S.M., Skyvell Nilsson, M., Ohlen, J., Rudman, A., 2013. Mastering the professional role as a newly graduated registered nurse. *Nurse Education Today* 33 (7), 739–745.
- Seers, K., 2007. Evaluating complex interventions. *Worldviews on Evidence-Based Nursing* 4 (2), 67–68.
- Senge, P.M., 2006. *The Fifth Discipline: The Art and Practice of the Learning Organization* (2nd edn). London, Random House.
- Tame, S.L., 2011. Secret study: A new concept in continuing professional education. *Nurse Education Today* 31 (5), 482–487.
- Tame, S.L., 2013. The effect of continuing professional education on perioperative nurses' relationships with medical staff: findings from a qualitative study. *Journal of Advanced Nursing* 69 (4), 817–827.
- Taylor, J., Irvine, F., Bradbury-Jones, C., McKenna, H., 2010. On the precipice of great things: the current state of UK nurse education. *Nurse Education Today* 30 (3), 239–244.
- World Health Organization, 2013. *Health 2020: A European Policy Framework Supporting Action across Government and Society for Health and Well-being*. WHO, Copenhagen.
- Wright, J., 2009. A quantitative pilot study evaluating the effectiveness of a venepuncture and cannulation study day. *Nurse Education Today* 29 (5), 555–560.

IMPACT ON PRACTICE FRAMEWORK

Table 1 Maximising the impact of CPE on practice: facilitators and inhibitors

Facilitators
Health service provider commitment: strategic approach to valuing CPE, ring-fenced and equitable access to funding, study time, workplace-based support
Alignment of organisational and individual priorities for CPE
Commitment of the manager: as a supporter, change agent and role model
Manager's clear expectations about how new learning will be used in practice
Students and managers having a clear understanding of course requirements
Readiness to study and adequate preparation to study
Course design (content and assessment) that meets service needs
Collaborative approaches to course evaluation
Mechanisms for celebrating achievement and success
Strong partnership working between education and service
Creating effective learning communities
Inhibitors
Clinical demands that restrict service involvement in developing, delivering and evaluating CPE
Education and service providers with different cultures, agendas and timescales
Inflexibility imposed by education providers
Lack of organisational processes that systematically support CPE in the workplace
Limited autonomy for students to initiate and sustain change
Juggling work and study alongside clinical role demands

Table 2 Enhancing the impact of CPE on practice implications for course design, delivery and evaluation

Design of CPE needs to:
Address the needs of practice
Be developed in partnership between education and service providers
Have flexible presentation dates
Have assessment strategies that meet both service and academic requirements
Have flexible assessment deadlines
Utilise teaching strategies that promote the integration of practice and academic needs
Delivery of CPE needs to:
Have careful and systematic induction for students, including:
<ul style="list-style-type: none"> • Study requirements
<ul style="list-style-type: none"> • Learning outcomes
<ul style="list-style-type: none"> • Study demands (time and academic level)
<ul style="list-style-type: none"> • Time management
<ul style="list-style-type: none"> • Assessment requirements and deadlines
<ul style="list-style-type: none"> • Sources of learner support and guidance
<ul style="list-style-type: none"> • Requirements of IT access and skills
<ul style="list-style-type: none"> • Relevant documents including reading lists
Include an induction for managers
Have a guide specifically developed for managers
Be flexible in response to students' work-related demands
Foster communities of learning
Be delivered in partnership between education and service providers
Evaluation of CPE needs to:
Include the opportunity to celebrate successful course completion collaboratively
Be developed in partnership between education and service providers
Purposefully incorporate the impact of CPE on practice
Consider longitudinal approaches to capture longer-term impact