Healthcare Improvement and Continuing Interprofessional Education: Strange bedfellows or perfect partners?

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Abstract

The relationship between healthcare improvement and continuing professional education needs to be better understood if we are to promote continuous service improvement through interprofessional learning in the workplace. We propose that situating interprofessional working, interprofessional learning, work-based learning and service improvement within a framework of social learning theory creates a continuum between work-based interprofessional learning and service improvement in which each is integral to the other. This continuum provides a framework for Continuing Interprofessional Development that enables service improvement in the workplace to serve as a vehicle through which individual professionals and teams can continually enhance patient care through working and learning together. The root of this lies in understanding that undertaking improvement and learning about improvement are co-dependent and that healthcare professionals must recognise their responsibility for improving their everyday work as well as doing it. We believe that significant opportunities exist for healthcare commissioners, service providers and educational institutions to work together to jointly promote Continuing Interprofessional Development in the workplace to enhance patient outcomes and outline some of the opportunities we believe exist.

Key words: Continuing interprofessional education, **i**nterprofessional education, interprofessional learning, healthcare improvement, continuous quality improvement, social learning, continuing interprofessional development.

Introduction

The underlying aim of health care improvement can be expressed as continually improving the match between our services and the needs of the people who depend on them. [1] The ideal conditions for achieving this are when everyone working in healthcare recognises they have two jobs when they come to work everyday; 'to do their work and to improve it'. [2]

This fundamental aim provides the context for this paper which explores the relationship between healthcare improvement and continuing interprofessional education, or more particularly continuing interprofessional development (CIPD) which the authors use as a term to include interprofessional education and interprofessional learning since these terms are not necessarily synonymous.

The quality context

High quality health care has been described as that which is clinically effective, personal and safe. [3] Effective interprofessional working is central to achieving this and thereby the outcomes required. [4] However despite the best efforts of hard working committed health professionals this is a surprisingly rarely

achieved goal. [5-6] Achieving continuous quality improvement necessitates improving the care delivered at the front line [7-9] and depends upon synthesising the professional and technical knowledge and skills of care givers with care delivery processes. Recognition of this mutual interdependence is crucial since the performance of even the most knowledgeable and skilful staff will be limited if the processes within which they work together are flawed. [2, 5, 10-11]

Traditionally the individual has been viewed as the source of quality and safety and hence the focus of training to prevent and solve problems.[12] Most healthcare professionals lack the knowledge and skills to play an effective role in service improvement [13-14] and may see acquiring these skills as time spent on 'organisational issues' not necessary to their work[12] although they are important competencies for a wide range of staff.[15-17] Professional education generally lacks a focus on key skills of improvement [15] although these have been well described.[10, 19-20] Attempts to reconcile these tensions include an early seminal paper describing a framework for combining professional knowledge with improvement knowledge[21] and more recently a model emphasising the need to seamlessly link the improvement of outcomes, the improvement of systems and the improvement of professional development.[2]

The educational context for improvement

Quality improvement is a still developing body of knowledge and practice with origins in a wide range of different sciences.[12, 22] It is claimed that it has made enough progress to be considered a discipline in its own right [23] and can serve as a place in which these different sciences are brought together; each with

their own focus, knowledge base and methodologies; creating a sum greater than the parts. [24]

Education for quality improvement aims to equip practitioners and managers with the skills to:

i. create an ethos of continuous reflection and a commitment to ongoing improvement

ii. assess the performance of healthcare and individual and population needs

iii. understand the gaps between current activities and best practice

iv. have the tools and confidence to develop activities to reduce these gaps. [25]

Maintaining the highest level of quality requires attention in three areas of education and learning:

i. the professional, clinical and technical skills of all staff supporting the patient

ii. the active development by staff of specific skills and experience in improving care using evidence based improvement methodologies

iii. continuous 'action learning' by teams as part of their everyday practice to continually reflect on, and improve, the care they provide.

Two recent systematic reviews of quality improvement training for healthcare professionals suggest that whilst it may have an impact on knowledge and

confidence to perform quality improvement in the workplace its effect on behaviour seems to be small. Evidence of impact on the quality of healthcare and its outcomes is even more elusive. [25-26] Addressing this challenge does not simply mean designing more courses [27] but in part requires exploring the social context and mutual interdependence of continuous quality improvement, interprofessional working and interprofessional education if we are to create meaningful CIPD that will continually improve the care provided.

Interprofessional Education

It has been claimed that good interprofessional working will be enhanced by effective interprofessional education (IPE).[28] The most widely used definition of IPE is that offered by the UK Centre for Advancing Interprofessional Education (CAIPE) as: 'Occasions when two or more professions learn with, from and about each other to improve collaboration and the quality of care'.[29]

IPE in healthcare is not new and is well documented. [30-32] There is emerging evidence that IPE can in favourable circumstances contribute to improving collaboration in practice.[33-34] Feedback from students suggests they value interprofessional learning opportunities [5, 35-36] and the positive effects of these which through application in practice have produced demonstrable benefits to service delivery.[37-40]

Although current evidence suggests we cannot yet confidently assert a clear link between IPE and improvement in interprofessional working IPE is worth continuing as there is no evidence to the contrary.[30] IPE therefore remains a key objective for educators[34, 41-43] and this is likely to continue for the foreseeable future especially as we try to develop effective interprofessional learning.

The relationship between interprofessional learning and healthcare improvement

Interprofessional learning puts service users at the centre, promotes collaboration between professionals, reinforces collaborative competence and relates collaborative learning to collaborative practice. [30]

Healthcare improvement is similarly patient centred and has the potential to cross professional boundaries. It is enacted through interprofessional collaboration and its methodologies belong to no one professional group. Improvement learning can therefore create powerful opportunities for facilitating meaningful interprofessional learning which go beyond shared education to shared learning in the true sense of the CAIPE definition.[44]

Learning to use evidence based improvement methodologies is about healthcare professionals learning together since by their very nature they require collaborative endeavour which provides a very powerful learning experience for students. [37-39] Learner evaluations suggest that learning about

improvement can act as a powerful catalyst for promoting IPE to health care professions students.[44]

Learning and working together on improvement that is focused around patients' needs reconnects professionals with the deep feelings that brought them into healthcare and taps into their innate enjoyment of learning.[10] Improvement learning is very 'active'.[45] It stimulates interprofessional conversations that promote collaboration as professionals come to understand and value each other's experiences and perspectives in pursuit of their shared goal of providing the very best patient-focused care.[13] By providing a common language that transcends professional backgrounds and boundaries healthcare improvement offers a learning framework that can strengthen the mutual trust amongst individuals working together that is crucial to continuous improvement and effective practice. [11, 35, 42-43]

If we are to achieve the aim of building continuous improvement through everyday learning we must recognise the potential of improvement methodologies (eg plan-do-study-act [PDSA] cycles)[20, 45-46] to go beyond simply generating context specific service improvements. They provide the opportunity to challenge the status quo in practice and to stimulate and support fundamental change and innovation in systems and organised care settings.[17,47] This is reflective of 'double loop learning'[48] and increasing use of education strategies such as Action Learning (double loop learning in practice) to facilitate continuous improvement [49] by developing new ways of thinking and

acting in the workplace.[50] Such individual and organisational development facilitates critical reflection[51] by small groups who take action to address real work issues and learn from their attempts to improve things.[52-55] It also recognises that learning is an integral part of everyday life and working practice[56] although this can be a significant challenge for both learners and organisations[16,57] and requires established social relationships and communication skills. [58]

Learning in context for healthcare improvement

Improvement in practice results from people learning together through interprofessional endeavours in the workplace which can provide a supportive learning environment [58] although work based learning has not been a traditional part of CPD for many disciplines.[50] Fusing learning about improvement with doing real improvement work has become a key driver[14] and provides a practical vehicle through which interprofessional working is facilitated and supported. In essence learners cannot learn about improvement in isolation from their fellow health care colleagues.[39] Sustainable improvement requires teams to maintain continuous improvement through continuous learning by and within the team. In this way learners experience improvement in action as experiential learning[59] through 'reflection in' and 'reflection on' practice.[51, 60] Caring for patients and learning from this process integrates practice-based learning with improvement [61] leading to changed behaviour in the workplace.[37-38,58] Learning how to do quality improvement

and actually carrying it out are essentially the same thing and are both forms of experiential learning.[46] Practice based learning for improvement should be expected, encouraged and rewarded[50] since it leaves a legacy of improved care for patients and transferable skills for learners.[10]

Framing continuous quality improvement and CIPD within social theories of learning links learning about improvement and improvement as learning in a continuum between practice and education. This represents a shift from the traditional focus on individual learning to considering the social context and interaction on practice based team learning.[58] Social theories emphasise the need to consider learning 'for, at, and through work'[62-63] and link continuous professional development and interprofessional working by positing the notion of learning as social participation.[11] Learners are seen as active participants in natural 'Communities of Practice' defined as 'groups of people informally bound by shared expertise and interest in a joint enterprise'.[63-64]

It is a characteristic of these groups that their members do not necessarily work together everyday but meet because they find value in their interactions as they share information, insights and advice. [65] The practical value of such contact creates a body of common knowledge, practices and approaches underpinned by personal relationships and established ways of interacting.[65] These ideas apply very well to interprofessional teams in healthcare whose members may be meeting every day, formally or informally, as they carry out

their daily tasks with the shared purpose of improving their patients' health status.

The term 'Clinical Microsystem' has been coined to define 'small groups of people who work together on a regular basis to provide care to discrete subpopulations of patients[6] and who can be considered as communities of learning which engage individuals in actively refining practice Healthcare improvement principles and methods provides a common purpose, common language and common knowledge leading to shared actions which stimulate and maintain an upward spiral of shared learning and improvement and nurture a common sense of identity.[65] Their members' learning is multi dimensional and involves learning as doing, learning as belonging, learning as becoming and learning as experience[63] which relate well to elements of learning for improvement .

Table 1 about here

Table 1 illustrates the linkage between social learning and improvement learning in relation to each other. For social learning theorists and service improvement practitioners learning by doing is demonstrated through the actual "doing of service improvement", for example PDSA cycles. Learning as belonging helps to develop a shared practice ethos improving patient experience. Learning as becoming is realised when practitioners view themselves as service improvement practitioners as well as professional

practitioners. Finally, learning as experience is enacted through the process of continuous reflection in, on and through practice.

Clarifying the relevance of each individual's professional knowledge base in practice and linking this with improvement knowledge should improve their confidence and strengthen their professional self concept of self as practitioner fused with self as improver.[21, 35, 66-67] This may help us move towards the aim of everyone understanding that they have two jobs.[2]

Opportunities and challenges

Establishing seamless links between interprofessional working, interprofessional learning, work-based learning and service improvement is at the core of creating the conditions for CIPD as we envision it. It can be described by a metaphor where these elements are considered as the warp and weft of a rich and vibrantly coloured tapestry within which many colours are interwoven to produce a picture that no colour can produce alone.[68] This requires education to move beyond its role in keeping individual staff up to date in a rapidly changing world to contributing to the development of a social learning culture in practice settings as being core to the way we all work, and most importantly, work together. Figure 1 shows how we see the elements integrating across permeable membranes through the intentional nourishing of social learning to weave the CIPD tapestry at its centre. This core is grounded

within the wider world of service providers and educational institutions to emphasise the importance of their joint roles in weaving the tapestry and the model also acknowledges that social learning occurs outside the core. However it centres on CIPD being the everyday life of teams working and learning together as communities of practice to continuously improve the quality of the care they provide.

Fig 1 about here

We identify below some key opportunities and challenges that if successfully addressed can help make this ideal a reality:

i. Acknowledge and support the innate desire and ability of clinical teams to improve quality through CIPD by doing improvement and learning improvement skills at the same time. Strengthen informal CIPD by nurturing continuous reflection and improvement as a natural part of everyday work.

ii. Deepen our understanding of the theory and practice of improvement and CIPD for improvement being the same thing and especially how social learning in the workplace leads to collective knowledge creation stimulating innovation and improvement in practice and increasing productivity. [69] This raises taxing governance

questions that need to be addressed about when improvement is improvement and when it is research. [22]

iii. Help Educational Institutions and service providers to understand that although they have different expert roles they share the purpose of improving healthcare quality. Educators need to use their educational expertise to facilitate learning processes within work settings which enable the integration of individual and systems dimensions of practice and learning[17, 55] and allow staff to fuse their specialist professional knowledge with improvement knowledge. This may help to resolve potential tensions around educational institutions being predominantly funded by credits awarded for qualifications valued by individual employees whilst employers are predominantly concerned with meeting their organisation's skill needs [70]

iv. Use our new understandings to prepare strong business cases for educators and providers to jointly invest in integrated approaches to CIPD that support the development of a learning and improvement culture[71] in the practice setting. [50]

In England educational funding is increasingly being moved from universities[70] and being placed in the hands of healthcare commissioners. This offers opportunities for innovative purchasing of

learning that will improve quality as well as the achievement of business targets but requires a new type of dialogue and climate of trust with close collaboration between Commissioners, Service Providers and Educational Institutions.[17] This climate of trust should enhance quality of care, personal and professional growth and understanding of organisational development. [72]

This resonates with current activities by Higher Education Institutions (HEIs) to develop healthcare staff who are fit for purpose within a rapidly modernising Health and Social Care sector.[73-74] It is imperative within a competitive market driven context that HEIs work closely with local employers and education commissioners to ensure the development of curricula that meet service/employer needs. [4,38-39, 50,75-76]

v. Identify ways to establish career paths for academic teachers and service based practitioners of improvement, perhaps most significantly fusing these two roles. [23, 45, 77] This will require staff from different professions with educational roles to gain first hand experience of doing improvement and working interprofessionally to establish effective approaches to learning improvement in the work place. [14, 45]

Conclusion

If we are to achieve the aim of healthcare teams continuously improving the quality of the care they provide to their patients we need to deepen our understanding of what is needed to enable them to work and learn together as part of their everyday life. This requires that healthcare professionals and interprofessional teams not only understand that doing their work and improving it is core to their identity but that they feel it to be important. In this paper we have presented what we believe to be core elements of CIPD for achieving this and perhaps more profoundly propose social learning as a framework within which these core elements can be interwoven to create the necessary culture.

We have identified the need to change the nature of conversations and relationships not only between professionals in the workplace but between commissioners, healthcare providers and educational institutions. We are convinced that within practice settings we are knocking at an open door and that strategic trends in health and education policy are also moving in the right direction.

If we seize the moment and nourish CIPD within practice we will learn how to harness the power of interprofessional teams to create the future for healthcare that we all desire. They in turn must be prepared to change the nature of perhaps the most important conversation of all; that between themselves and their patients. The rapidly growing field of experience-based

design (eg architecture, computers) emphasises the importance of designing human experiences rather than merely processes and adds a new dimension to healthcare improvement. It focuses on the stories behind patients' 'touch points' with a service as they work over time with teams as co-designers of improved care.[78-79] This new relationship can serve as both an integrator and a driver for the CIPD elements and places patients within the communities of learners that lie at its heart.

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Table 1 Linking social learning and improvement learning

Social Learning	Improvement Learning
Learning as doing	Implementing service improvement through PDSA cycles
Learning as belonging	Developing a shared interprofessional framework through which to improve practice for the benefit of patients
Learning as becoming	Identifying self as improver
Learning as experience	Continuous quality improvement through continuous reflection in and on practice

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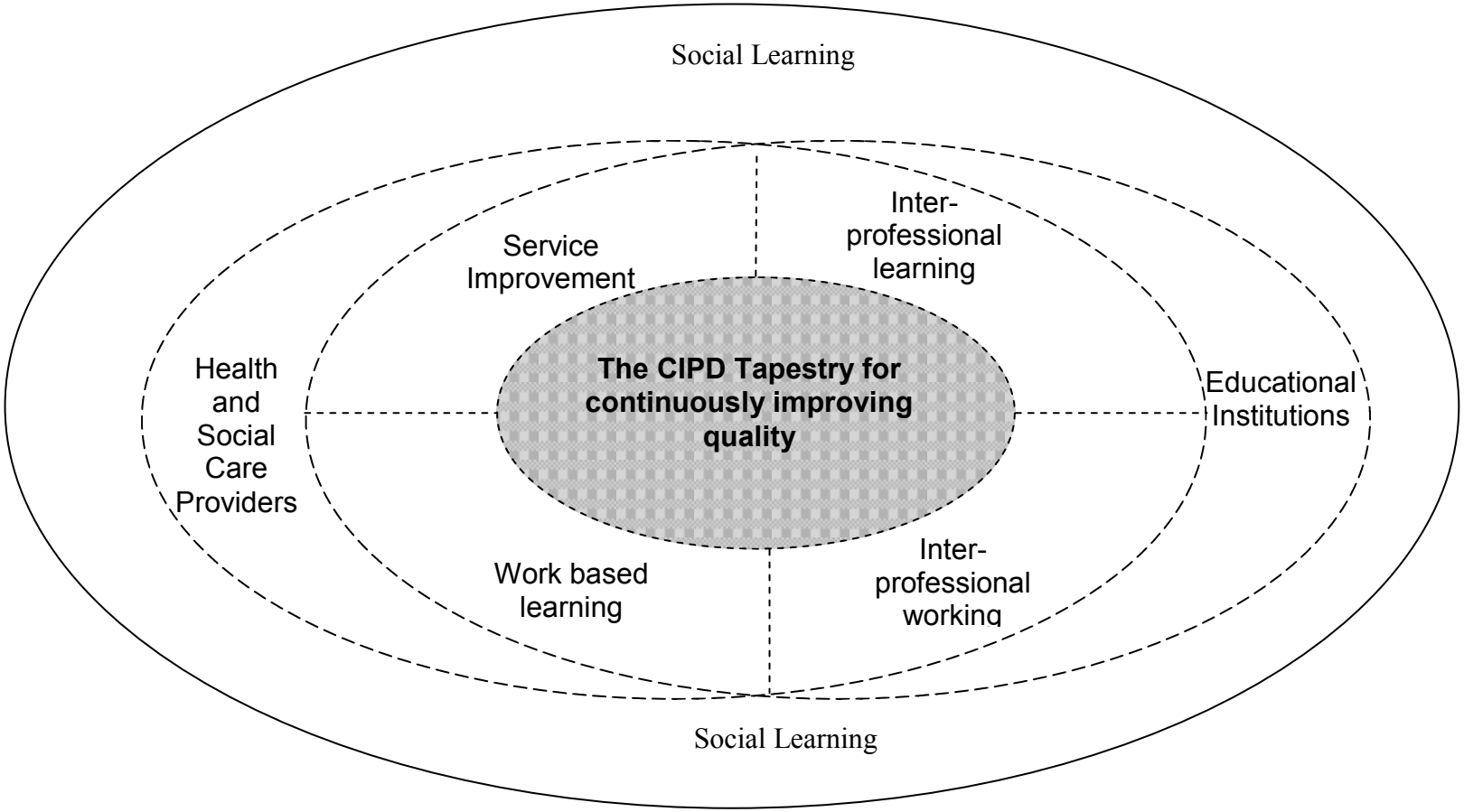
Figure 1 The Tapestry of CIPD for Continuous Healthcare Improvement: A conceptual model



Lessons for Practice

- Focusing on patients' needs provides a motivating purpose for both healthcare improvement and for professional education
- Continuing interprofessional development must be based on social learning in the workplace if healthcare professionals are to learn new skills that improve services and outcomes for patients
- Healthcare professionals and teams must understand their two jobs of doing their work and improving it
- Continuous improvement depends on moving beyond context specific improvement projects to creating the conditions for continuous reflection as part of everyday practice
- Patients and carers must be intimately involved in designing and delivering both improved care and CIPD.
- Healthcare commissioners, providers of care and educational institutions must work innovatively together to establish the imperative and the social learning conditions necessary for CIPD that improves the quality of healthcare.