

England Centre for Practice Development



Continuing Professional Development (CPD) for quality care: context, mechanisms, outcome and impact

Education Outcomes Framework Round 2 Funding

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Glossary of Terms

Glossary Term	Description
Competence	The habitual and judicious use of communication, knowledge and know how, technical skills, clinical reasoning, emotions, creativity, values, best practice evidence and reflection in daily practice for the benefit of the individual, team, organisation and community being served that underpin safe and effective health care practice and intervention.
Continuing professional development (CPD)	A range of learning activities through which professionals maintain and develop their knowledge and skills throughout their career to ensure that they retain their capacity to practice safely, effectively and legally within their evolving scope of practice
Effectiveness	Effectiveness is the extent to which planned outcomes, goals, or objectives are achieved as a result of an activity, strategy, intervention or initiative intended to achieve the desired effect, under ordinary circumstances taking into account their relative importance.
Evaluation	Evaluation is the systematic acquisition and assessment of information to ascertain the value and merit of a subject (e.g. a program, policy, technology, person, need, activity etc.). Evaluation uses a set of criteria that may be ex-ante (prospective), ex-post (retrospective).
Evidence (for impact)	The available body of facts or information indicating whether a belief or proposition is true or valid. Evidence of impact, for example, could include the extent to which research/education outcomes have been taken up and used by policy makers, and practitioners, or have led to improvements in services or business.
Impact education	Is the demonstrable contribution that education makes to the economy, society, culture, public policy or services, health, the environment, or quality of life, beyond contributions to academia. Assesses whether a particular intervention works in relation to its defined objectives.
Indicator	Quantitative and qualitative evidence of the degree to which a result is occurring over time. They should be relevant; repeatable, verifiable and time-bound.
Innovation	Innovation is the invention and implementation of a new or significant improvement in, for example, a product (good or service), process, new marketing method or a new organisational method in business practices, workplace organisation or external relations. Innovation is more than just the generation of novel ideas or the dissemination of knowledge, it is about making a change or doing something in a new way. It is the implementation element that separates <i>knowledge</i> and <i>invention</i> from <i>innovation</i> .
Inputs	What we use to do the work. The financial, human, material and knowledge resources used to deliver a research/education intervention.
Knowledge transfer/translation	Knowledge transfer is deliberately embedding knowledge for use in a context beyond the researcher's own sphere.
Metrics	A system of related measures used to assess performance and quantify particular characteristic outputs or outcomes.
Outcomes	The changes to people resulting from the activity, and measure

	progress towards achieving that change through an organisation's work.
Outputs	The direct and tangible products from the activity.
Research	Research is defined as the creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies, inventions and understandings. This could include synthesis and analysis of previous research to the extent that it is new and creative. This definition of research is consistent with a broad notion of research and experimental development (R&D) as comprising creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man [human-kind], culture and society, and the use of this stock of knowledge to devise new applications.
Research outputs	Products (including traditional and non-traditional research outputs), services or results (e.g. report) produced as a result of undertaking research.
Research quality	The standard of reliability, validity, credibility, trustworthiness and ethical practice of a piece of research.
Return on research investment	A measure that evaluates the performance of the research investments including economic, social, and/or environmental impacts.
Stakeholders	A person, company, community or industry with some interest in the research intervention.
Uptake and adoption	The application of research outputs by users, resulting in outcomes. This may involve complex processes over time, whereby research outputs (e.g. knowledge, technologies, and intellectual property) are adapted, built upon and operationally applied. Evidence of engagement, uptake and adoption, may include licenses, incorporation into policies or standards, use of tools, etc.
Value	Something that has value is not subordinate to anything else. Something can have value for its own sake. This differs from impact because impact is about achieving a means to an ends. Understanding the distinction between value and impact is key to CPD because CPD requires action to be taken to bring about change and transformation.
Work-based learning	Work-based learning is a process that concentrates on how learning takes place within the workplace. It is stimulated by workplace activities that engage the learner in discussion and debate with workplace colleagues. This critical dialogue, if facilitated and adequately resourced, can trigger a transformation of workplace culture into one that captures situated learning to enhance not only the individual, but also team and even organizational working practices.

List of Abbreviations

A&E	Accident and emergency
AHP	Allied Health Professionals
AHSN	Academic Health Science Networks
ASCL	Association of School and College Leaders
BASW	British Association of Social Workers
CCCU	Canterbury Christ Church University
CC	Competent and Capable Staff
CCETSW	Central Council for Education and Training in Social Work
CCG	Clinical Commissioning Group
CDC	Centres for Disease Control and Prevention
CIPD	Chartered Institute of Professional Development
CLAHRC	Collaboration for Leadership in Applied Health Research and Care
CLN	NHS Clinical Leaders Networks
CMO	Contexts, Mechanisms, Outcomes
CPD	Continuing Professional Development
CPE	Continuing Professional Education
DfEE	Department for Education and Employment
DoH	Department for Education and Employment
ECPD	England Centre for Practice Development
EE	Excellent Education
EOF	Education Outcomes Framework
EU	European Union
FoNS	Foundation of Nursing Studies
FPH	Faculty of Public Health
GP	General Practitioner
HE	Higher Education
HEE	Health Education England
HEFCE	Higher Education Funding Council for England
HCPC	Health and Care Professionals Council
HR	Human Resources
IERG	International Expert Reference Group
KPI	Key Performance Indicators
KSF	NHS Knowledge and Skills Framework
L&D	Learning and Development
LETB	Local Education and Training Boards
LLL	Lifelong Learning
NHS	National Health Service

NHSE	NHS England
NHSIQ	NHS Improving Quality
NMC	Nursing and Midwifery Council
PALS	Patient Advice and Liaison Service
PCF	Professional Capabilities Framework
PPI	Public Patient Involvement
R&D	Research and Development
RCN	Royal College of Nursing
SD	Staff Development
SWRB	Social Work Reform Board
TOR	Terms of Reference
UK	United Kingdom
VB	NHS Values and Behaviours
VB 2a-f	NHS Values and Behaviours Patient Experience of Care and Treatment
TCSW	The College of Social Work
THF	The Health Foundation
WBL	Work Based Learning

Executive Summary

CPD for quality care: context, mechanisms, outcome and impact

Introduction and Context

Continuing Professional Development (CPD) is the means by which health care practitioners¹ maintain their knowledge and skills to ensure competence to deliver person centred safe and effective care that responds flexibly to society's changing needs. CPD can involve any relevant learning activity, whether formal and structured or informal and self-directed. The Department of Health published the Education Outcomes Framework (EOF) in 2013 identifying the need to ensure that the health workforce has the right skills, behaviours and training, available in the right numbers, to support the delivery of excellent healthcare and health improvement. The intention is for the framework to act as a catalyst for driving quality improvement and outcome measurement throughout the NHS by encouraging a change in culture and behaviour, including a renewed sense of focus on addressing variation in standards and ensuring excellence and innovation in providing education. The EOF is intended to be used to monitor the outcomes of the education and training system in the wider health and care system. The challenge is that there is little empirical evidence regarding the effectiveness of CPD in the workplace, and a lack of metrics to measure impact on the individual practitioner, team, service and on patient outcomes.

The England Centre for Practice Development responded to the Department of Health tender call to EOF Expert Reference Group members in 2013.

Research Aim, Questions and Objectives

The study set out to develop and test a CPD Impact Tool that identifies mechanisms for measuring the impact of learning on individual, team and organisational effectiveness in relation to improvements in quality of care and patient outcomes in the workplace.

The research questions, mapped to the domains of the Health Education England (HEE) Education Outcomes Framework (EOF) were:

1. Which indicators are useful for providing information on individual and team effectiveness in relation to improvements in quality of care and patient experience in the workplace? (EOF Domain 1, 2, 3, 5).
2. How can these impact indicators be synthesized to develop a tool to measure individual and team effectiveness in the workplace? (EOF Domain 1, 2, 3, 5).
3. What are the indicators of organisational effectiveness appropriate to include in a CPD impact tool? (EOF Domain 1-5).

¹ Practitioners are health care practitioners across primary and secondary care at bands 1-8 of the NHS Career Framework

The research objectives agreed with commissioners were:

1. To develop a CPD Impact Tool that encompasses impact indicators.
2. To identify and test impact indicators of effectiveness with an expert stakeholder critical reference group.
3. To refine the tool to ensure impact is captured at individual practitioner, and team level.
4. To provide evidence of evaluative impact for measuring organisational effectiveness of CPD programmes on the health and social care workforce.

Methodology and Methods

Realist Synthesis and Evaluation (Pawson and Tilley 2008) was chosen for this study because it focuses on understanding and unpacking the mechanisms by which an intervention (CPD) works (or fails to work), thereby providing an explanation as opposed to a judgment about how it works (Pawson et al 2005). The realist approach is fundamentally concerned with theory development and refinement (Rycroft-Malone et al 2010; Pawson 2006; Pawson et al 2005) accounting for context as well as outcomes in the process of systematically and transparently synthesizing relevant literature (Rycroft-Malone et al 2010; Pawson 2006). It focuses on providing explanations for why interventions may or may not work, in what contexts, how and in what circumstances, and for whom (Greenhalgh et al 2011).

The study was divided into two phases as outlined in Figure 1 below.

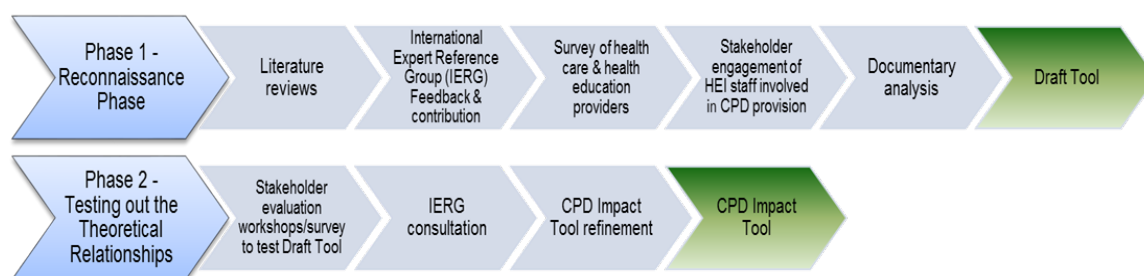


Figure 1: Research Study Phases

Phase 1 Methods:

The literature review set out to identify what is known about CPD in three broad themes underpinned by 12 critical questions:

- What CPD is and why it is important.
- Purpose and impact of CPD.
- Facilitating and Judging the Effectiveness of CPD.

Data were derived from the literature review, stakeholder surveys, consultation with an international expert reference group (IERG) education providers and facilitators, and documentary analysis of CPD learning outputs. Synthesis of data led to development of a theoretical framework (termed the CPD Impact Tool) for understanding the context in relation to the provision of CPD, its drivers, outputs and impact.

The primary purpose of CPD and four other related purposes were identified as (i) enabling individual transformation and professional growth, (ii) developing knowledge and skills to meeting society' s changing needs, (iii) getting knowledge and research into practice to improve the standards of patient care, and (iv) using knowledge to create positive learning in the workplace to transform the wider team.

Consistent with a realistic evaluation approach, four general theories of transformation were distilled to describe and explain relationships between the contexts and mechanisms of CPD to achieve specific outcomes, linking these in turn to impact and potential indicators. This theoretical framework seeks to identify what works for whom in what circumstances, with a specific focus on the indicators of effectiveness and outcomes of CPD.

The four transformational theories describing and explaining CPD and linking these to a specific set of outcomes are:

- Transformation of individual's professional practice.
- Transformation of skills to meet society's changing healthcare needs.
- Transformation of knowledge enabling knowledge translation.
- Transformation of work place culture/context to implement workplace and organisational values and purpose relating to person centred, safe and effective care.

The four theories of transformation enabled four specific action hypotheses to be generated and the related mechanisms, context and outcome relationships (MCO relationships) to be proposed.

Phase 2 Methods:

In Phase 2 the CPD Impact Tool was tested with CPD providers and CPD learners through 7 regional workshops, and teleconference was provided for those stakeholders who could not be present at the workshops. Further scrutiny and critical review was provided through consultation with the project International Expert Reference Group.

Quantitative data from the workshops was used to refine the outcomes and indicators. Indicators were ordered according to the frequency of their use. Indicators felt the easiest and hardest to measure and those felt most worthwhile were collated. Qualitative data from the workshops was considered and accordingly used to develop the transformation theories.

The outputs from Phase 2 were:

- CPD Impact Tool Transformation framework with mechanisms, context and outcomes' (MCOs) relationships and indicators of outcome identified.
- Synthesised model for CPD integrating its purpose and transformational approaches, focus and interrelationships for person centred safe and effective health care.

Findings

The main report presents a synthesis resulting from the two phases of data collection and analysis providing:

- The overarching framework for understanding effective CPD.
- Four transformation theories.
- Impact indicators useful for determining the impact of CPD, and
- A range of ways to evaluate achievement of CPD impact.

CPD for whole systems transformation includes the:

1. **Inputs** to CPD e.g. stakeholders expectations and requirements, contextual factors around CPD provision.
2. **Processes of transformation** in CPD, informed by the literature and different philosophical understanding underpinning education, learning and its purpose.
3. **Outputs, outcomes, and individual, team and organisational impact** of CPD.

We demonstrated in our findings that the main purpose of CPD is the delivery of person centred safe and effective evidence informed care in the workplace. The primary purpose at the heart of Figure 2 are four other related purposes of CPD that focus on the individual's as well as the team's journey of transformation in their work and their workplace, specifically the transformation of:

- The individual's professional practice
- Skills to meet a continually changing context
- Knowledge, so that it is used and blended with other knowledges² in practice through knowledge translation approaches
- The workplace culture/context

Our findings indicate that this is achievable through the fourfold purposes of:

1. Transforming individual professional practice.

² Knowledges encompasses theoretical and practical knowledge, knowledge of the person being cared for/worked with, experience, expertise, artistry, creativity and local knowledge.

2. Bringing about social change through learning and achieving social values in the workplace.
3. Updating, developing, and making use of knowledge in the workplace.
4. Being useful to the changing needs of society.

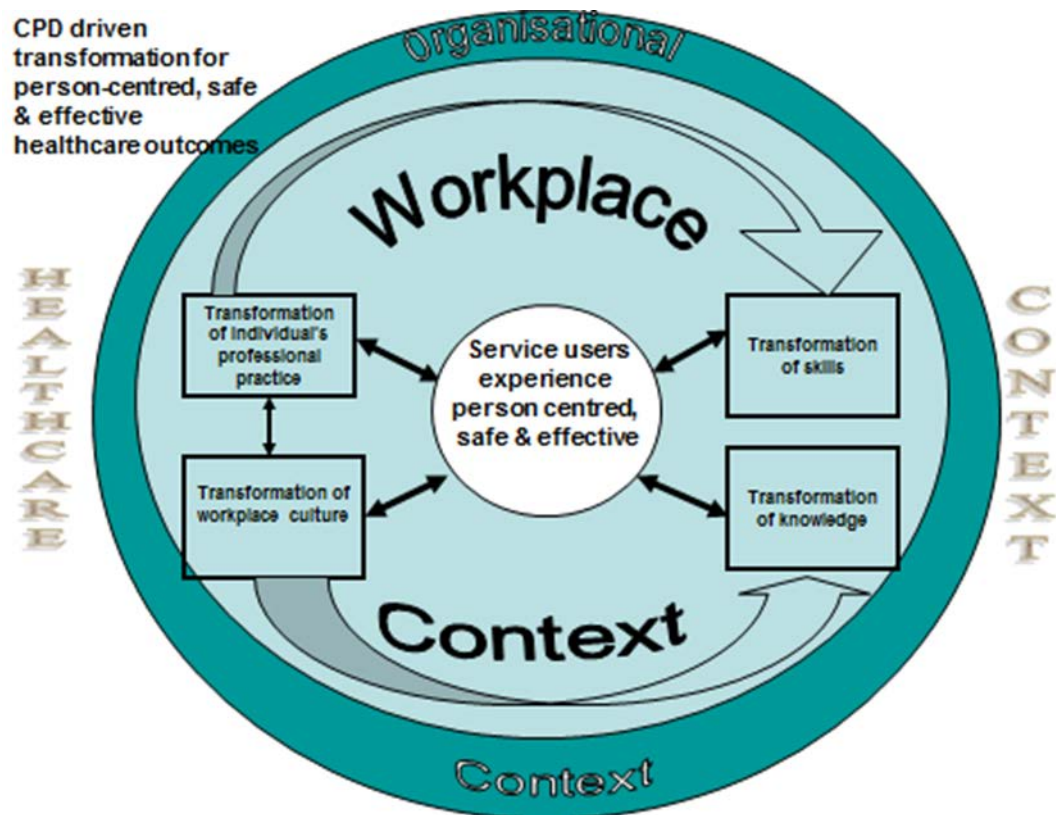


Figure 2: Four Main Purposes of CPD

Illustration of the indicators identified at the end of Phase 1 for the outcomes of each of the transformation theories			
Transformation of individual professional practice	Transformation of skills to meet service provision for society's needs	Transformation of knowledge/knowledge translation	Transformation of work place teams/context to deliver on organisational values
Individual Indicators of effectiveness 1.1. Self awareness 1.2. Self confidence 1.3. Emotional intelligence 1.4. Critical Reflection 1.5. Role Clarity 1.6. Person centred practice 1.7. Compassion 1.8. Active Lifelong learning 1.9. Career progression & personal growth 1.10. Positive attitude to change 1.11. Skilled & competent 1.12. Active listening/ communication 1.13. Speaking up for human rights 1.14. Role Model 1.15. Using evidence systematically 1.16. Positive impact on patient experience 1.17. Creative problem solving	Service & Organisational/Systems Indicators 2.1. Shared purpose framework 2.2. Shared values 2.3. Inclusive culture 2.4. Commitment to LLL 2.5. Quality metrics 2.6. Effective use of Resources 2.7. Compliance with national standards 2.8. Whole systems working 2.9. Systems for shared governance 2.10. Good partner relations 2.11. Creativity & innovation 2.12. PPI and public trust 2.13. Organisational awareness & intelligence	Team & organisational Indicators 3.1. Shared vision & purpose for service 3.2. Person Centred culture 3.4. Effective levels of staffing 3.5. Patient safety metrics 3.6. Improved patient flow & discharge 3.7. Integrated working 3.8. Patient at heart of decision making 3.9. Systematic mechanism for capturing best and poor practice 3.10. Patient experience 3.11. Reviewing & improving standards/Clinical Audit)	Team & Organisational Indicators 4.1. Role clarity & responsibility 4.2. Shared vision & values 4.3. Interdisciplinary team working 4.4. Person centred team culture 4.5. Collaborative decision making 4.6. Effective team communication 4.7. Positive learning culture 4.8. High challenge & support 4.9. Innovation & creativity 4.10. Peer learning & review 4.11. Commitment to lifelong learning 4.12. Skilled facilitation of others 4.13. Systematic use of evidence to inform practice

Individual and Team Impact Indicators

CPD indicators identified as being most useful for providing information on individual and team effectiveness relate to a combination that demonstrate the team is working effectively to deliver person centred safe and effective care in a knowledge rich and inclusive environment.

- Self-efficacy (self-awareness and self-confidence).
- Shared vision and values.
- Role clarity.
- Interdisciplinary team working.
- Collaborative decision-making.
- Peer learning and review.
- A sustained person centred safe and effective culture.

Service and Organisational Impact Indicators

The outcomes and associated indicators most useful for measuring service and organisational effectiveness were identified as:

- Shared vision and values for the service/organisation
- Integrated team working
- Patient at the heart of decision making
- Patient experience
- Systems of shared governance
- Person centred, creative and innovative learning culture
- Organisational awareness and intelligence
- Systematic mechanisms for capturing best and poor practice
- Patient safety metrics
- Effective staffing levels

Organisational effectiveness requires the outcomes of the other 3 transformation theory domains to be evidenced and demonstrated.

Conclusions

Our findings have concluded that in order for CPD to be effective it has to address all of the outcomes for individual, team, service and organisational transformation, because they are interrelated and interdependent. The study takes a whole systems approach to CPD, and although all four theories are important and interdependent, there is a need to focus on some areas before others if the primary purpose is to be achieved optimally and consistently. Transformation of workplace culture and individual professional practice are important pre-requisites to the other two sub purposes of CPD if the transformation of skills and transformation of knowledge are to achieve their full impact in the workplace on service users. Both the workplace and organisation are key influencers on whether the outcomes of CPD are achieved for the individual because both the workplace and the organisation can negatively or positively impact on what is considered important to focus on in terms of learning and development content, whether the workplace can be used as a resource for learning and how learning and development may be enabled. Therefore, we should be focusing on the development of individual professional practitioners as transformational whole systems leaders in order to reap the benefits of enhanced knowledge and skills, which will in turn promote enhanced team effectiveness in the workplace in an ever changing context in order to capitalise on CPD resources and investment.

The focus of CPD users and CPD providers may be across different transformational areas at any point in time, but the relationships and interdependences between the areas were generally acknowledged as being important to understand if the full potential and impact of CPD is to be achieved.

Recommendations

Recommendations for Health Education England, Regulators and Policy Makers

1. The CPD Impact Tool provides the mechanisms to demonstrate application and evaluation of the EOF domains using a whole systems integrated approach to measuring the impact of CPD learning on individuals, teams, services and organisations for health care professionals. It could form the basis of a national benchmark for CPD programmes across the country to demonstrate whole systems integrated learning, development, improvement, inquiry and innovation.
2. The Tool has the potential to provide an evidence based self-assessment framework for professional revalidation, registration as well as being transportable from one institution or organisational to another (educational passport).

Recommendations for Commissioners of CPD

3. The report recommends that more emphasis should be placed on the importance of learning in the workplace which is at the heart of providing person centred safe and effective integrated services and care for the public. In order to deliver this vision that integrates learning with development, improvement, innovation and inquiry in the workplace there is a need for facilitation skills that embraces all of these areas and mechanisms for accrediting individuals and workplace programmes. We believe that more emphasis should be placed on commissioning of workplace programmes of learning to keep pace with rapidly changing practice needs and contexts. This approach would overcome the traditional theory-practice gap. The Tool also has the potential to guide commissioning and tendering documents where providing benchmark measurements may be difficult. For example the number of people who can demonstrate role clarity, or number of people who have achieved promotion.

Recommendations for Providers of CPD Learning

4. The Council of Deans for Health could support a national pilot of the Tool to offer opportunity for further testing and refinement. Working with a number of pilot implementation sites in England, it could be used by HEIs in order to measure the impact of the outcomes and indicator measurements on CPD learners.
5. The CPD Impact Tool could provide a valuable benchmark tool for designing curriculum for professional programmes leading to registration or specialist qualifications and be used to design teaching, learning and assessment and impact evaluation strategies.
6. Further development of the impact indicators for knowledge translation is needed and we would recommend this provides opportunity for HEIs to work in partnership with CPD facilitators and workforce planners to achieve this.

Recommendations for Health Service Providers

7. The impact indicators could be used by organisations to develop a quality dashboard linked to improvements in patient experience and outcomes which would provide an integrated whole systems approach to workforce planning, and learning and

development for all professions. In turn the dashboard has the potential to generate impact reports for individuals, teams, services and organisations.

8. The individual impact indicators are relevant to all health disciplines and may be useful for annual appraisal, personal development review and career progression planning as well as thinking about how CPD learning can improve practice. Impact indicators provide a mechanism by which professional competence may be demonstrated.

Recommendations for Facilitators of CPD learning in the workplace

9. The Tool provides an opportunity to guide facilitators' ongoing development of their learning and development skills broadening these across all areas that reflect key health and social care purposes.
10. In our programmes of research associated with workforce transformation we feel it is important to consider implications for commissioning joint appointments for CPD workplace facilitators between clinical or health care settings and HEIs. This model would strengthen active learning from the workplace.

1. Introduction

Continuing Professional Development (CPD) is crucial for enabling individual practitioners³ to gain a deeper understanding of what it means to be a professional along with greater appreciation of the implications and impacts of their work on the delivery of person centred safe and effective evidence informed care. Advancing the body of knowledge and technology within a profession ensures health care professionals keep pace with the knowledge, skills and competences required to meet changing population health needs and service delivery models, and to make a meaningful contribution to their team, service and organisation. In turn this increases public confidence in individuals as professionals and their profession as a whole and public interest is safeguarded. Whilst there is great national support for investment in CPD for current and future workforce development, evidence that the impact of CPD learning makes a difference to patient outcomes is elusive. There is therefore an urgent need to develop ways of evaluating the impact of CPD in health care to ensure that CPD contributes to individual, team, service and organisational effectiveness and has a positive impact on patient outcomes.

A joint statement from nursing, midwifery, and allied health professional bodies, in 2007, highlighted the importance of CPD for improved quality care outcomes and the positive development of healthcare workers, who remain more motivated and satisfied, when helped to engage in CPD (RCN 2007). This statement identifies consensus from both government and regulatory bodies (DoH 1998, 2000a, 2000b, 2002, 2004; NMC 2011; HCPC 2005), but, while it states that CPD should have demonstrable learning outcomes, there is acknowledgment that the assessment, measurement and evaluation of such is underdeveloped and inconsistent (Mathers 2012; Academy of Medical Royal Colleges 2010;; Clark et al 2008; Fryer 2006;). Roessger (2013) reaffirms the need for evaluation and measurement of the effectiveness of CPD (in the context of reflective learning and instrumental learning activities), suggesting that the link between improved patient experience and outcomes is assumed but not adequately researched or verified.

Draper and Clark (2007) have written on the current climate of needs-led and educational outcomes focused healthcare, and point to the fact that CPD is presently unable to continue to articulate its value due to the lack of impact evaluation. Roberts et al (2014) conducted a UK wide study of patient experience training and provision that found a lack of evaluation methods for training and staff education, especially in terms of practical and tangible tools that measure the impact of CPD on patients' experience and health outcomes.

The England Centre for Practice Development at Canterbury Christ Church University successfully tendered a research application to Health Education England in their second round funding call in September 2013 and commenced the 12 month project in earnest in December 2013.

³ Practitioners are health care practitioners across primary and secondary care at bands 1-8 of the NHS Career Framework

1.1. Project Aim

The project aimed to devise and test a CPD Impact Tool that identifies mechanisms for measuring the impact of CPD learning on individual, team and organisational effectiveness in relation to improvements in quality of care and patient outcomes in the workplace.

1.2. Research Questions

The research questions were mapped to the domains of the Health Education England (HEE) Education Outcomes Framework (EOF) to articulate their intention.

1. Which indicators are useful for providing information on individual and team effectiveness in relation to improvements in quality of care and patient experience in the workplace? (EOF Domain 1, 2, 3, 5).
2. How can these impact indicators be synthesized to develop a tool to measure individual and team effectiveness in the workplace? (EOF Domain 1, 2, 3, 5).
3. What are the indicators of organisational effectiveness appropriate to include in a CPD impact tool? (EOF Domain 1-5).

1.3. Objectives

The research objectives were agreed with commissioners as:

5. To develop a CPD Impact Tool that encompasses impact indicators.
6. To identify and test impact indicators of effectiveness with an expert stakeholder critical reference group.
7. To refine the tool to ensure impact is captured at individual practitioner, and team level.
8. To provide evidence of evaluative impact for measuring organisational effectiveness of CPD programmes on the health and social care workforce.

2. Literature Review

2.1 Background

This review takes a voyage through current thinking around CPD and its effectiveness, offering insight into imperative questions that seek to underpin the project and contribute to the emergence of a robust and systematically developed CPD impact evaluation tool with a strong philosophical underpinning. The purpose of the literature review, as the initial foundation to the project in the reconnaissance Phase 1, was to identify potential impact indicators to assist in the generation of a draft CPD Impact tool, which could then be

evaluated by a range of stakeholder groups involved in workplace learning programmes in different health care and educational contexts in Phase 2.

The review considers healthcare literature and evidence systematically derived from examining human resource management and organisational development and the social care sector (significant work has been undertaken in relation to CPD impact evaluation in social care).

The review is structured around a set of key questions (Figure 3) generated with our International Expert Reference Group, which broadly form three themes that provide the most appropriate mechanisms for exploring the macro, meso and micro applications of CPD and its effectiveness in the workplace. It examines how CPD is defined and delivered, its purposes and impact before concluding with an exploration of how CPD effectiveness can be recognised and facilitated.

Figure 3: Key Questions Guiding Literature Review

What CPD is and why it is important

- How do we define CPD?
- Who provides CPD currently and where does it happen?
- What are the current drivers for CPD?

Purpose and impact of CPD

- What are the main purposes of CPD?
- What impact does CPD have on patient /user experiences?
- What impact does CPD have on health professionals and their career development?
- What impact does CPD have on services and providing organisations?

Facilitating and Judging the Effectiveness of CPD

- What are the enablers and processes by which CPD learning occurs?
- How are these related to educational theory and philosophy?
- What methodology and methods have been used to evaluate and measure the impact of CPD?
- What does current evidence tell us about gaps in measuring impact and why?
- Why is a whole systems approach to CPD at individual team and organisational level?

2.2. Search Strategy

To assist in the search for relevant literature the following databases were used:

Figure 4: Database Search

Arts and Humanities Citation Index (Web of Science)
ArXiv
ASSIA: Applied Science Index and Abstracts
Biomed Central
British Nursing Index
Dialnet
Directory of Open Access Journals
Emerald Journals
ERIC (US Department of Education)
INFORMS Journals
IBSS (International Bibliography of Social Sciences)
JSTOR
M.E. Sharpe
MEDLINE
MLA International Bibliography
Oxford Journals
PILOTS: Published International Literature on Traumatic Stress
PMC (PubMed Central)
Psyc ARTICLES (American Psychological Association)
SAGE Journals
Science Citation Index Expanded (Web of Science)
SciVerse ScienceDirect (Elsevier)
Social Science citation Index (Web of Science)
Taylor & Francis Online Journals
Wiley Online Journals

Using Boolean operators the search terms used were:

- Education CPD outcomes
- CPD outcomes and team effectiveness
- CPD outcomes and organisational effectiveness
- Education and indicators of effectiveness
- Education outcome indicators
- Education and CPD and outcomes tools
- Education and CPD and outcomes framework
- Education and CPD and outcome model
- Culture and context for learning and action
- CPD and work based learning
- CPD and workplace learning
- Education processes and innovation

The databases were searched for journal articles, conference papers, newspaper articles, books, e-books, and journal titles in the wider national and international academic community. To also include grey literature, such as reports and policy documents, Google Search and Google Scholar were utilised.

Table 1: Categories of Literature

Reports	Peer Reviewed Journal Article	Discussion Paper	Conference Paper	Forum Paper	Books (academic publications)
39	114	1	1	1	26

Journal articles, conference papers, and newspaper articles were considered to provide for a broad range. It is important to point out that much of the literature uncovered originates from nursing, suggesting that relative to healthcare overall, more work has been carried out from this perspective. Due to time constraints, papers retrieved were restricted to the English language; and European, American, Australian and Canadian countries only.

The review illustrated the complexity of the topic, highlighting differences in practices, terminology and approach. It showed that there is considerable variance in CPD across countries and across the sectorial health professions, with mandatory and voluntary systems, and formal and informal delivery of CPD, sometimes existing side-by-side depending on country and profession. National approaches, such as the (self-) regulation of a profession, are reflected in the governance and structures of CPD. Accreditation systems are also diverse, and reflect different health systems and professional and educational cultures and values, and are managed by different bodies across the UK and more widely across the EU. Lastly it was found that there is a relative dearth of evidence of the impact of CPD on patient care outcomes, and on clinical and professional practice.

2.3. Theme 1: What is CPD and Why is it Important?

Critical Questions:

- How do we define CPD?
- Who provides CPD currently and where does it happen?
- What are the current drivers for CPD?

2.3.1. How do we Define CPD?

There is widespread recognition of the importance of continuous professional development (CPD) and life-long learning (LLL) of health professionals across the EU (EAHC 2013). The

term CPD is sometimes used synonymously with other terms including continuing professional education (CPE), Lifelong learning (LLL) and staff development (SD) (Quinn, 2000 cited in Gallagher 2007).

Further, different disciplines offer different perspectives on what constitutes CPD and CPD activity. CPD can incorporate any continuing education, professional development, staff development, skills competency, work based learning, and practice development. CPD can be understood to be multidisciplinary and extensive existing across many areas. It also comprises multiple approaches and understandings, meaning it can be described as any formalised professional development and also any informal collective or individual undertakings (Lammintakanen and Kivinen 2012). The most comprehensive inclusive definition of CPD was recently published in a pan European Union study of health and social care:

“The systematic maintenance, improvement and continuous acquisition and/or reinforcement of the life-long knowledge, skills and competences of health professionals. It is pivotal to meeting patient, health service delivery and individual professional learning needs. The term acknowledges not only the wide ranging competences needed to practise high quality care delivery but also the multi-disciplinary context of patient care” (EAHC report 2013: 6).

This definition includes technical, scientific, regulatory and ethical developments, as well as research, management, administration and patient-relationship skills. Activities are categorised as formal/informal and mandatory/voluntary and summarised in Table 2. This report provides the most comprehensive summary available on CPD typology being used currently across EU member countries.

Table 2: European Definitions of CPD

Type of CPD	Definition
Formal CPD	Activities undertaken intentionally with the objective of improving knowledge, skill and competences, which are planned and can be recorded, verified and certified. This may include learning activities such as attending courses, seminars, conferences, and workshops, teaching and preparing lectures, higher education programmes, blended learning, peer review, as well as other directed professional activities, including online courses / distance learning, and reading professional journals involving knowledge assessments, study visits, etc.
Informal CPD	Activities undertaken intentionally and contributing to the improvement of knowledge, skill and competences, which may or may not be recordable and verifiable. This may include incidental learning opportunities such as spontaneous interactions and conversations with colleagues and other health professionals, learning from mistakes and from feedback, but also planned learning activities such as attending in-service education programmes, self-directed professional reading of books and other types publications, participation in social media discussions, etc.

Type of CPD	Definition
Mandatory CPD	CPD that is mandatory for a professional, on the grounds of predefined requirements set by a competent authority (e.g. regulator or professional body), sometimes related to relicensure, re-registration or revalidation. Mandatory CPD may require activities to fulfil, e.g., minimum requirements pertaining to the number of study days or credits to be gained in a set time period, the number of study days needed in a set time period, requirements for providing evidence of the CPD activity or other requirements. It may encompass both formal and informal CPD activities.
Voluntary CPD	CPD that is not mandatory for a professional on the grounds of predefined requirements set by a competent authority (e.g. regulator or professional body) and is in particular not related to re-licensure, re-registration or revalidation, regardless of whether or not there are professional guidelines in place for the profession in question. It may encompass both formal and informal CPD activities.

The medical profession identifies CPD as a continuing process, outside formal undergraduate and postgraduate training, that supports specific changes in practice and also enables individual practitioners to maintain and improve standards of medical practice through the development of knowledge, skills, attitudes and behaviour (Schostak et al., 2010). This appears to acknowledge the mandatory requirements for maintaining standards and for professional revalidation purposes.

In the Faculty of Public Health (FPH) CPD policy and guidance document, Mackie (2007) defines CPD as that component of learning and development that occurs after the formal completion of postgraduate training. FPH perceive CPD to comprise purposeful, systematic activity by individuals and their organisations to maintain and develop the knowledge, skills and attributes which are needed for effective professional practice.

The British Association of Social Workers (2012) views CPD as an on-going, planned learning and development process, which improves practice, contributes to lifelong learning and enables career progression. The Allied Health Professions Project (2002:10) defined CPD as '*a range of learning activities through which professionals maintain and develop their knowledge and skills throughout their career to ensure that they retain their capacity to practice safely, effectively and legally within their evolving scope of practice*'. The HCPC (2005) use the same definition and recognises both the formal and informal mechanisms of learning. According to the HCPC, CPD encompasses:

- Professional activity e.g. lecturing/ teaching, mentoring, being an examiner, being an expert witness, membership of professional bodies, giving presentations at conferences.
- Work based learning e.g. learning by doing, clinical audit, peer group learning, reflective practice, case studies, secondments, job rotation, analysing significant events.

- Formal/educational e.g. courses, further education, research, distance learning, attending conferences, writing articles and papers.
- Self-directed learning e.g. reading journals/ articles, updating knowledge through TV or internet, reviewing books or articles.
- Other e.g. public service, voluntary work and courses.

The Nursing and Midwifery Council standards for CPD (NMC 2011) recognize a mix of formal and informal learning activities appropriate to individual and service needs which can include mandatory training.

The definitions for the term CPD in various disciplines seems to imply the commitment to lifelong learning, a skill that is invaluable to all people across every segment of society. The CPD Certification Service distinguishes CPD as learning activities through which professionals develop their abilities and ensure they remain effective, and increasingly capable.

The Chartered Institute of Professional Development (CIPD) identify that CPD is a combination of approaches, ideas and techniques that help individuals manage their own learning and growth. From a business management perspective, the CIPD define CPD as a process by which individuals take control of their own learning and development, by engaging in an on-going process of reflection and action (Meggison & Whitaker 2007). This process is empowering and exciting and can stimulate people to achieve their aspirations and move towards their dreams. CIPD underline that CPD cannot be separated from the business driven perspective, but the need for CPD arises because security for individuals no longer lies in the job or organisation they work for but in the skills, knowledge and experience that they have within themselves.

For higher education institutions (HEIs) in the UK, CPD is distinguished as a formal course or events that provide some form of 'training' (King 2004), in addition to what is termed natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or organisation, which constitute, through these, to the quality of education in the classroom (Day 1999, Goodall et al 2005).

Despite inconsistencies and variances related to the content and the form of CPD activity, there seems to be a general consensus that CPD includes everything which has the effect of developing the professional individual in the course of their career (CIPD). On the other hand, Crawford (2007) argues that external demands placed upon individuals and organisations, for example, the push to meet the professional standards frameworks and institutional audit requirements, incline the value of CPD to formal approaches. Billet (2002) makes a distinctive observation relating to the tendency of definitions of CPD to focus on the individual, yet the goals of CPD activity are mutually interdependent on individual and organisational aspects. This is a key point as progression in understanding CPD impact needs to appreciate multilevel interrelated perspectives. Madden and Mitchell (1993:12) conceived a more indicative definition of CPD being *'the maintenance and enhancement of the knowledge, expertise and competence of professionals throughout their careers according to a plan formulated with regard to the needs of the professional, the employer,*

the professions and society". These needs can be extrapolated to the stakeholders already identified in the next section as: *professional* (individual practitioner/practice, *employer* (services and organisations), *professionals* (collective practice), and *society* (public health outcomes).

2.3.2. Who provides CPD currently and where does it happen?

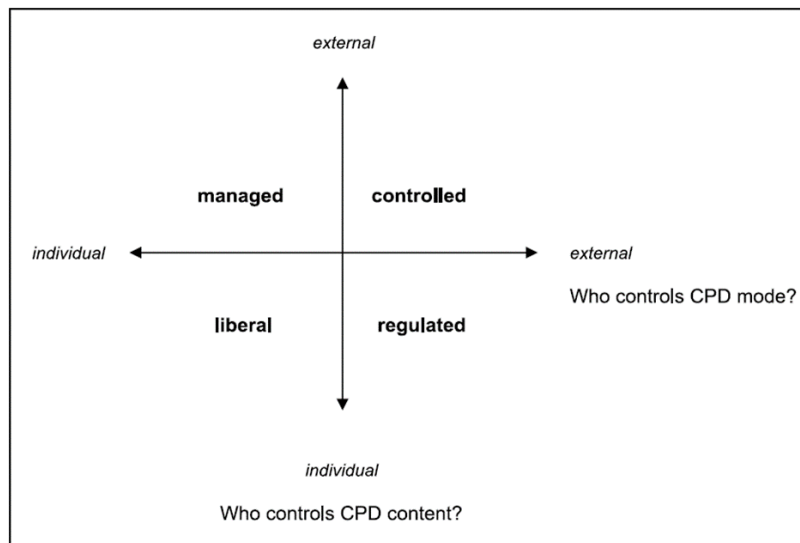
Who provides CPD at a national level is triggered by national reforms carried out in the country and the changes associated with it, for example as has happened with patient safety and the Francis Report (2013). However, there are a number of stakeholders with justifiable interest in the management of CPD at various levels.

- **Individual** practitioners have an interest in developing knowledge and skills because of potential employability and career progression benefits. Engagement can increase self-confidence and have a positive impact on relationships of trust between practitioners and service user.
- **Employers** see CPD as important to development, the constraint on resources dictates dual emphasis on reducing costs and increasing productivity. Employers invest in employees' CPD with the hope that the result is increased efficiency and effectiveness and innovation. Universities continue to offer post-qualifying courses in a more flexible way to meet employer and practitioner needs (Moriarty 2013), although employers (private and third sector) also provide their own CPD.
- **Academic institutions** use CPD to help learners link their curriculum to the relevant and often pressing concerns of current work, or their future career. Academic institutions also develop CPD in response to the requirements of professional bodies.
- **Professional bodies and regulators** advocate CPD as a way of supporting their members and as a means to underpin individual Charter membership. CIPD as a professional body sets expectations because this will mean that its members keep themselves learning and therefore are able to deliver more effectively than those outside the membership who do not have the push to keep up with their CPD.
- **Commissioners** of local healthcare have ten main priorities that they need to deliver on according to The King's Fund (2013). In relation to CPD, the first priority has been identified as providing 'active support for self-management' (The King's Fund 2013:3). Achievement of this involves a number of processes, with one being through provision of 'opportunity to co-create a personalised self-management plan which could include patient and carer education programmes' (2013:3).

CPD requirements vary from organisation to organisation based on differing objectives, from externally assigned activities to internal training needs (CPD Certification Service 2014).

Bullock et al (2010) suggest that CPD regulation and control have a significant effect on education and recommend changes to the way CPD is controlled to have a much more profound influence in terms of impact. The authors devised an axis model (see below Figure 5) where the vertical axis denotes CPD content control and the horizontal axis indicates control over provision and amount of CPD. In a clockwise order, the quadrants denote 'managed', 'controlled', 'liberal', and 'regulated'.

Figure 5: CPD Regulation and Control



Bullock et al (2010) equate tighter regulation and control to less successful impacts, and instead suggest emphasis on individuals' and professionals' agency and autonomy as a more beneficial approach to CPD provision and content, because it is a more effective facilitation of multi-constituted learner needs.

There is disparity between the universal view of theory that imposes what a professional should be, i.e. a reflective practitioner, and the reality of what should be a more nuanced and critical/questioning notion that accounts for a plurality of ideas and theories. CPD should enable opportunities for all types of learning to take place, making for sustainable more contemporary concepts of reflective adaptable practitioners who can make the links between theory and practice work for their context (Casey 2012). Beattie (1987) attempted this through a 4 fold curriculum by embracing contemporary knowledge and policy, skills and interests.

In the NHS, CPD is determined through appraisal with a personal development plan agreed between the individual professional and their manager with the commitment of the necessary time and resources Professional bodies develop regulatory CPD strategies for revalidating their members. There are over 30 professional bodies and associations within the healthcare & medical sector that have implemented CPD for membership. (Department of Health, September 2007).

Like the health sector, several public and third sector organisations have staff with CPD obligations at professional bodies and associations. Where internal CPD training resources are low, organisations use outsourced CPD training providers to meet staff requirements. Outsourced CPD providers are usually experts in their field and provide practical learning opportunities through CPD events, seminars and accredited CPD courses (CPD Certification Service).

Many outsourced CPD training providers offer online CPD courses to supplement in-house provisions. The most common methods of delivering effective continuing professional development are via in-house presentations, workshops, training courses & assessments, structured conferences with breakout seminars, online learning, books, videos and informative newsletters (CPD Certification Service 2013). This approach suggests a focus more on delivering for awareness rising with the assumption that individuals will change their behaviour in the workplace. Universities continue to offer post-qualifying programmes in a more flexible way to meet employer and practitioner needs (Moriarty 2013). Baumgartner (2001) proposes that transformational learning is nurtured through participatory, exploratory, and collaborative (individual, group, and organisational) approaches. And therefore, in contrast to many outsourced delivery, current trends in educational thinking find significance in a focus on links to both the workplace and learning in the workplace, rather than just knowledge generation and knowledge awareness, because it is more effective and sustainable learning.

2.3.3. Sources of Funding for CPD

In the NHS registered healthcare practitioners can either pay the full or part fee and the remainder paid by the employer, charity or industrial sponsor. The Higher Education Funding Council for England (HEFCE) provides limited public funding to support the delivery of strategically important and vulnerable subjects (SIV) including pre-registration medicine and dentistry.

An employer may provide back-fill funding in the form of bank staff or secondments in order to allow an individual to undertake a CPD activity. This normally relates to credited CPD funding either from a university, statutory or professional body.

Health Education England provides leadership for the training, education and development of current and future healthcare staff. Local Education and Training Boards (LETBs), which are HEE committees governed by employers and professionals, lead local healthcare education and training of both clinical and non-clinical NHS staff to meet the needs of patients, the public and service providers within their areas (HEE *online*). The role of the General Medical Council in education and training is to promote and maintain the health and safety of the public so that patients now and in the future can be confident that they will receive safe, high quality medical care. This is achieved through regulating medical education and training by setting standards and requirements that must be met (General Medical Council *online*).

Other providers of CPD activity may be higher education institutions, further education colleges, health care organisations or external profit making companies or charities/non-profit making organisations (CPD Task and Finish Group 2012).

In the next section the drivers for CPD are explored. This assists in providing an understanding of the imperatives towards transformation and positive change within ever changing environments.

2.3.4. What are the Current Drivers of CPD – the Need for Transformation?

There are a number of different drivers of CPD including: political and economic climates, current trends in educational approaches, different and constantly changing workplace and professional contexts, and continuously shifting individual and society motivations and needs. Recognising the complex network of drivers, and how these are constantly changing has given rise to ideas that observe a need to combine theories of resilience and social learning as a way of continuously mitigating the negative, and of enabling continuous positive renewal and transformation (Sterling 2014; Pascale et al 1997). Gunderson's work (2000) identifies resilience as a property of 'adaptive capacity'. Resilience is the ability to endure disruption and disturbance, and in so doing maintaining stable states. However, there is a point at which disruption and disturbance is so overwhelming that change results and equilibrium slips away. In this sense resilience does not change, only the amount of disruption and disturbance does.' Adaptive capacity' extends the notion of 'slipping away' to that of moving between numerous stable states, thereby recognising that it is possible to have multiple stable states existing simultaneously and understanding resilience as having the capacity to alter. Looking to renewal and reformation, rather than a return to a particular singular state after overwhelming disruption and disturbance, Gunderson's (2000) work is useful for recognising ever changing and uncertain systems and contexts within which healthcare practitioners operate, effect change and transformation.

Similarly, for Sterling (2014) instrumental (practically purposeful) education should be sustainable education, and to this end should be imbued with both resilience theory and social learning theory. Intrinsic critical thinking by robust resilient learners and practitioners enables a critiquing of the social, the political, and the ecological towards active resistance against structures of discrimination and injustice (Clark 1993) and positive change and transformation no matter what uncertain futures bring (Pascale et al 1997). This melding of critically aware theory and practice signifies a paradigm shift around thinking, teaching, and learning for a sustainable world. This shift in thinking is important for informing how to continuously and positively transform practices, ways of working, and services in constantly changing environments. In environments where there are limited resources at the team, service and organisational level, and a need to work cross professionally and out of silos. There is a need for individuals to be able to grow resilience and use knowledge in practice.

In terms of policy and the economy, and to offer some general context to lifelong learning, over the last twenty years or so there have been considerable political and economic changes, and lifelong learning has been presented as a tool for meeting these changes. It has, for some, been considered the single most effective antidote to alterations in market forces. In 1998 David Blunkett, the then Secretary of State for Education and Employment, stated in the Green Paper *The Learning Age: A Renaissance for a New Britain* (DfEE 1998) 'education is the best economic policy that we have' (DfEE 1998). The Green Paper highlighted links between educational attainment and individuals' potential earning power, and it was from this point that lifelong learning (including CPD) became an integral part of education, extending beyond educational institutions into the workplace. Since December 1999, and following on from The Dearing Report (1997), key performance indicators (KPI) for HEIs on access, employability and progression have been published by the government (Pegg et al 2012; Massimiliano et al. 2004).

The NHS Knowledge and Skills Framework (KSF) defines specific knowledge and skills that all NHS staff need to deliver high quality care. Within the NHS educationalists are required to map courses against national frameworks and occupational and professional bodies' standards (Neville 2005).

Academic institutions use CPD to help learners link their curriculum to the relevant and often pressing concerns of current work, or their future career. Academic institutions also develop CPD in response to the requirements of professional bodies. Professional bodies advocate CPD as a way of supporting their members, and as a means to underpin individual membership. The human resources regulator CIPD, as a professional body, sets CPD expectations of its members because this will mean that they themselves as individuals keep learning and therefore are able to deliver more effectively than those outside the membership who do not have the push to keep up with their CPD.

The human resource perspective also understands that CPD cannot be separated from the business driven perspective, and that the need for CPD arises because security for individuals no longer lies in the job or organisation they work for but in the skills, knowledge and experience that they have within themselves.

Health Education England (HEE 2013) was tasked in 'future proofing' the health care workforce, ensuring the right number of people, with the right skills, values and behaviours are working in what is a wide range of different settings. The process for delivering this involves responding to local LETB assessments of their workforce needs along with forecasts for their areas. HEE then respond with a workforce plan, which essentially details the investment they will make. In a significant shift in thinking and orientation around health care education, and the continuing education and development of practitioners, Health Education England (2013) recognises that their strategies are currently largely driven by numbers, and that their approach needs to shift towards a much greater consideration of service user and patients' health care needs. Such a shift in approach requires more than simply recognising it needs to happen. Developing a shift in approach requires transformation in both ways of thinking and ways of working if it is to be achieved.

Lee (2011) recognises the Department of Health agenda that sees continued learning as a tool for up-skilling the healthcare workforce, but the agenda goes further in seeking to facilitate education for better patient outcomes. The purpose of the Department of Health's recent education policy *Education Outcomes Framework* (EOF) reflects this, and states its aim to '*ensure the health workforce has the right skills, behaviours and training, available in the right numbers, to support the delivery of excellent healthcare and health improvement*' (DoH 2013:4). Five domains have been identified in the policy document as facilitators of that delivery, comprising:

1. Excellent education.
2. Competent and capable staff.
3. Flexible workforce receptive to research and innovation.
4. NHS values and behaviours.
5. Widening participation.

Stemming from the conception of the most recent change to commissioning healthcare education and training - which is outlined in the Department of Health's 2012 publication *Liberating the NHS: Developing the Healthcare Workforce: from Design to Delivery* - at the foundations of the EOF is the intrinsic link between the impact of education and learning on improved patient outcomes.

Fenwick's work (2012) on healthcare education situates it as fundamentally different from other education because of governances by professional regulators (internal and external) and accountabilities for what is known by and what is done by practitioners; with recognition of more recent regulation being driven by performance indicators and outcomes. Fenwick (2012) calls for a reconceptualisation of professionals' learning that considers the sociomaterial (i.e. people, behaviour, objects, and tools, and of human beings as users and creators of these; of the material and immaterial as not distinct from each other, but as continuous (Fenwick 2010)). Recognising the social and material as mutually constitutive, Fenwick (2012) believes can provide a way of better informing CPD, because currently CPD reflects a limited understanding of the challenges of learning in what are diverse and multifaceted professional practices, as well as not adequately supporting the challenging and constantly fluctuating environments that professionals operate within.

Edmond et al (2007) looked specifically at public sector work based learning foundation degrees (FD) as CPD for the currently expanding and developing competencies and capabilities of workforces that have become known as 'para-professionals' or 'associate professionals'; who have traditionally been in low pay low status positions. The FD and work based model is seen by some as problematic because of its part academic part vocational nature and because of a lack of clarity about how employers should be involved, and the unclarified understanding of how they support the professionalisation of the workforce. Despite this, 'associate' and 'para' professionals make up a significant proportion of the healthcare workforce and engagement in CPD is an increasingly integral part of their roles, as well as an expanding area of provision for educational providers.

The practitioner, professional body and employer mainly comprise the CPD triad (Mulvey 2013). For the individual, keeping up to date enhances employability and offers the inherent satisfaction of doing a good job. It often refreshes, and can renew the self-confidence which encourages client trust in professional practice. For the employer, the current economic climate dictates dual emphasis on reducing costs, reducing duplication and increasing productivity. Employers invest in employees' CPD with the hope that the result is increased efficiency and effectiveness.

Professional bodies seek public trust. CPD as a requirement to registered practitioners demonstrates appropriate governance and reasonable care in that a professional body can assure itself and its stakeholders that standards are monitored and exacted (Mulvey 2013).

The College of Social Work (TCSW) recommends that social work students and practitioners use the Professional Capabilities Framework (PCF) in conjunction with interim appraisal and supervision structures to identify learning requirements. Critics of the PCF as a sole CPD guide approach suggest that it often leads to fragmented learning and mechanistic approaches to assessment, lacking balance and depth (Skinner and Whyte 2007; Mitchell

2001). The opposite of this is required for transformational learning and development, as sustainable transformation is only achievable through commitment to, and action towards, interrelated whole systems change by all (Sterling 2010).

Since its inception in 1991 by the Central Council for Education and Training in Social Work (CCETSW), the PCF has continued to undergo revisions to address shortfalls in post qualifying training (Rixon and Ward 2012; Taylor et al., 2010). The TCSW defines the PCF, which is divided into nine interdependent domains that represent the knowledge, skills and values that social workers need to practice effectively. Throughout their careers, social worker practitioners need to demonstrate integration of all aspects of learning, and evidence competence across all nine domains. Progression between levels is characterised by changes over a variety of professional attributes, such as the ability to manage authority, complexity and risk.

Employers in organisations need to have a culture that values and facilitates learning with a view to effective management and service delivery. Employers have a responsibility to actively provide learning opportunities to meet the professional development needs of social workers and to ensure they meet CPD requirements.

Post-qualifying study is demanding, especially in the context of workload pressures. Some practitioners may feel gloomy about prioritising their development needs without obvious external drivers, such as allocated funding, a tightly defined framework, professional regulatory requirements, and may be having to look at personal drivers. Doel et al. (2008) found professional and career development, financial incentives, academic and/or personal development to be the key driving factors for undertaking continuing professional development.

2.4. Theme 2: Purpose and Impact of CPD

Critical Questions:

- **What are the main purposes of CPD?**
- **What impact does CPD have on patient /user experiences?**
- **What impact does CPD have on health professionals and their career development?**
- **What impact does CPD have on services and providing organisations?**

This section begins by outlining the purposes of CPD and then moves on to explore literature and research that focuses on the impact of CPD.

The literature proposes a range of CPD purposes, which include meeting individual needs through commitment to lifelong learning (HCPC 2005; Megginson & Whitaker 2007), the maintenance and enhancement of healthcare workers knowledge, skills, experience, and competence and meeting the needs of patients/service users (Mitchell 2010) through delivery of flexible, quality, safe and effective care (RCN 2007; HCPC; Carpenter 2011).

Delivering on organisational (Billet 2002; Goodall et al (2005) and societal values (Madden and Mitchell (1993) for person centred safe and effective health care, builds healthcare contexts and teams individually and collectively that sustain a culture of lifelong learning.

2.4.1. What are the main purposes of CPD?

CPD in healthcare is ostensibly about having a positive impact on patient/user experience and outcomes (HEE 2014). Our findings indicate that this is achievable through the fourfold purposes of:

5. Transforming professional practice.
6. Bringing about social change through learning and achieving social values in the workplace.
7. Updating, developing, and making use of knowledge in the workplace.
8. Being useful to the changing needs of society.

2.4.2. What impact does CPD have on patient/user outcomes?

These purposes are underpinned by theoretical understandings of transformational learning and education for a healthcare context, specifically because such learning and education embodies the necessary attributes to achieve positive multi-level change. Later in this review the purposes of CPD for healthcare will be examined in greater depth and linked to relevant theoretical literature.

Offering insight into what is a research gap, The Health Foundation (THF) (2013) conducted an evidence scan of evaluations on patient experience by looking at 328 empirical study sources. THF recognise that there is a lack of evidence around the effectiveness of methods and tools being used to measure CPD impact. This is echoed for allied health professionals (AHP) in Dorning & Bardsley's (2014) Quality Watch report that focuses on how quality care is measured. THF (2013) recommend that patient experience, in particular, needs to be assessed over time otherwise it is merely a reflection of a fixed point that does not track significant changes. The study also suggests that carers' experience is a neglected area, as are the experiences of children and people with particular health experiences, such as cancer. Dorning & Bardsley (2014:18) point out that measuring AHP effectiveness needs '*to measure both how effective a service/professional/intervention is at improving health benefits for patients, and how care is delivered in practice to the appropriate people at the right time*', and emphasises the longevity that would be involved in ensuring this.

A UK study by Lee (2010) looked at the impact of CPD in terms of positive practice change for patients and found that practitioners' own enthusiasm and motivation was the strongest driver for positive change. The study also identified difficulties in measuring impact because of the multiple levels (organisational and individual) at which it needs to be assessed, and is an illustration of the necessity to focus on different levels of CPD impact.

In their literature review of dementia education Innes et al (2012) found no paper that had evaluated the impact of education upon service users and highlighted that evaluating the

impact of any educational initiative from a service perspective is fundamental to high quality evidence based care.

Phillips et al (2012) carried out a study on the impact of CPD on patient and family outcomes with specific focus on palliative care nurses working in rural areas of Australia. The findings showed evidence of extremely sparse positive impact, especially in terms of patient outcomes, and consequently recommended further research. The study also flagged up maintenance and up-skilling of computer and technology competence as a potential barrier for learners in terms of making use of more blended and distance learning technologies, especially those working in isolated or rural areas.

Mather et al (2012) studied, so called, 'hard' outcomes for patients when they assessed the impact of doctors' CPD, but the study did not explore patient/service users' perceptions or experiences and reported findings based on statistical or anecdotal data, for example adherence or referral rates.

Manley and Hardy (2005) looked at improving patient services through the development of critical care teams. This work recognised that ongoing and continuous supported engagement in staff development was necessary for ensuring patient/service user services are both effective and person centred.

The occasional assessment of the impact of CPD on service users' experiences derived through recourse to the assessment of training on practice does not provide a reliable indicator (Ogilvie-Whyte 2006). Training, as opposed to learning and development, has, most prominently in social work education and training, continued to be central to the recommendations of inquiries into cases of system and practice failures to protect vulnerable people from harm. However, the distinction between education and training is rarely explicitly made and the tendency is to use the terms interchangeably - the former being predominantly concerned with issues that surround critical reflection, theoretical thinking, and the latter with equipping practitioners with routine skills and competencies. Taylor's (2008) work emphasises the significance of education and development over training by identifying three different perspectives to transformational learning, which are *psychoanalytical*, *psycho-developmental*, and *social-emancipatory*. These cognitive dimensions are critical for developing self-sufficient and critically reflective lifelong learners.

Following the events at Staffordshire hospital (Francis 2013), the focus on assuring patient safety has continued to gain central momentum in health policy and practice and healthcare staff are trained to recognise risks to patients and the clinical human factors which impact upon patient safety. The growth of improvement science methodologies is testament to the importance of translating knowledge for improvements in evidence based practice to meet society's changing needs. Professional revalidation processes proposed recently by professional regulator bodies intends to improve safety, quality and effective delivery of care for patients. Achieved through regular participation in appraisal, the process ensures that the healthcare workforce is up to date and fit practice. Nevertheless there is a worry that future revalidation may render CPD and personal development plans more procedural than developmental (NHS Revalidation Support Team 2014). CPD plays the crucial part for continued fitness to practice and patient safety as well as maintaining professional

standards, and is effective only to the extent that the skills and behaviours learned and practiced during instruction are actually transferred to the workplace (Marvin et al 2010).

In summary, CPD impact on service users falls into three interrelated parts: Firstly, there are enablers of that impact, such as practitioners' enthusiasm and skills. Secondly, there are processes that enable CPD purposes, such as curricula that value measurement and evaluation of patient outcomes. Thirdly, the impact of those enablers and processes to provide a) positive patient experience and patient outcomes, b) positive career outcomes, and c) links to impact on service and organisational outcomes.

The following section reflects understandings of CPD impact from practitioner/professional perspectives, but occasionally incorporates some understanding of service user impact, although these are somewhat presumed and not derived specifically from research that involves service users.

2.4.3. What Impact Does CPD Have on Health Professionals and Their Career Development?

The Chartered Institute of Professional Development (CIPD, 2014) claim that, centrally, CPD works for individuals, and it makes complete sense to engage with the process whether they are under pressure to do it from others or not. The three main benefits of CPD for individuals are updating (maintenance), competence (survival) and enhanced mobility. These benefits are important for informing CPD impact indicators of effectiveness.

More work has been carried out that explores the health professional perspective as opposed to that of service users, and is evidenced in a literature review offered by Jacono and Griscti (2006) that investigates the effectiveness of CPD in nursing. Whilst acknowledging a general lack of CPD evaluation they recognise that when it does happen it is usually done from the practitioner perspective.

The work of Bennett et al (2010) outlines the importance to CPD for healthcare professionals having a theoretical underpinning/framework that is based on ethical and moral consensus, and centred on adult learning needs and active learner involvement (andragogy). The underpinning framework is couched in the use of critical reflective practice that is aligned to desirable values. This basis is fundamental for beginning a process for CPD that is progressive, innovative and furnishes practitioners in a way that enhances their capability to meet the needs of services.

Factors that influence the learning of, in particular, nurses who have undergone work based CPD in palliative care have been explored by Connell et al (2011). The learning approach in this study was self-directed and work based, which was felt sustained and supported enhanced learning outcomes when experienced as positive engagement; although this was only the case when the learning was felt to be inclusive, collegial and where organisations embodied cultures of learning. Such crucial environments were shaped by the interactions between the staff, learners, and patients. This was a very small scale (five interviews) Australian study, but the changing demographics towards an older population are similar to

the UK context. The recommendation for a new framework for the education and development of healthcare professionals, in order to provide a more flexible workforce - to meet society's needs - is also comparable, as is the recognition that there is a lack of literature that focuses on the qualified health professional.

Bullock et al (2010) emphasise that CPD is regulated and controlled differently according to professional context, which has a significant effect on educational impact. Given the interprofessional nature of healthcare, the inconsistency of CPD regulation and control requires a sophisticated and clever tool for measuring and evidencing CPD impact that takes such disparity into account and works to militate against it. Taking an integrative whole systems view of CPD learning and impact evaluation would break down the barriers of professional silos associated with different regulatory frameworks. The second part of Bullock et al's (2010) study looked at the value of personal development plans as an indicator of CPD impact on practice and concluded that when used with educationalist support they were beneficial.

Gould (2007) has looked at the impact of CPD at organisational and individual level and how that can hinder growth of competences and of more capable staff. On an individual practitioner level learning loads were seen as intruding into personal life and as disturbing work life balance. In the Gould (2007) study, CPD was perceived to have the capacity to enhance service delivery through both individual effort and a cascading effect, allowing new knowledge and skills to reach other staff. However this potential effect was cited as highly dependent on the ability and willingness of managers to 'allow' CPD to be implemented and cascaded.

A small scale study (18 participants) was undertaken by Landor (2011) on educational psychologists in Scotland to explore their understanding of the impact their Master's level research had on their practice, service delivery, and on stakeholders. The study resulted in mixed understandings of impact. Review of the impact on their own practice was felt to be high, but perception of the effect it had on service or on other stakeholders was mixed, and as a consequence recommendations were made for improvements at university (HEI), service, and individual levels.

HEI level

1. For learner to consider impact with the research they undertake.
2. For a portal of research dissertations to be made available as a resource for services to draw upon.

Service level

3. Trainee practitioners disseminate their research to placements.
4. Serving practitioners encouraged to engage in formal research with financial support.
5. Promotion of research and evaluation within the service.

Individual level

6. Newly qualified practitioners to be responsible for continuing to disseminate their research.
7. Practitioners to continue to engage in research and build a research profile.
8. For trainees to consider the needs of their service as well as own developmental needs when choosing a research topic.

Both the Gould (2007) and Landor (2011) studies, whilst having small sample sizes, provide further evidence for the need to work towards understanding the impact of CPD on multiple levels.

In 2012 Casey published a UK based seven year longitudinal study which explored the impact of CPD through teachers' experiences and their understanding of their needs. Whilst this is a study of school teachers, it is useful because of its professional and practitioner orientation, and for the emphasis placed on the link between research/inquiry and impact. It concludes that engagement in standardised CPD that excludes inquiry and research based approaches to learning and teaching and that is delivered outside the workplace is not beneficial in terms of the impacts CPD providers intended. Learning in the workplace is key to healthcare practitioner learning because it is about using knowledge effectively in real situations. A 'practitioner as researcher' approach is advocated as an emancipatory approach that offers the freedom to learn, to influence, make change, and take action.

In a Canadian systematic review protocol Legare et al (2011) aimed to appraise existing instruments used to assess the impact of CPD on clinical practice. The authors suggest that behaviour change (social cognitive), a key component of transformational learning, was the most effective impact outcome. The review was to inform the development of a global theoretically based tool, and then to evaluate its possible use and to work towards its implementation. The first phase of the study (Legare et al 2012) outlined in the protocol looked at the shared decision making of healthcare professionals, which is a key attribute of effective workplace cultures, and especially so if it includes patients in the decision making. Legare et al (2012) suggested that programmes which promoted shared decision making and integrated working were little evaluated and evidence for their effectiveness was very limited.

Lammintakanen & Kivinen (2012) have studied nurses' attitudes towards CPD and the differences in either formal or informal CPD engagement dependent on age. This Finnish study had 653 participants and, although relatively large in size, indicates more research is needed in this area. The study is interesting because it is an investigation of 'difference' and how different bodies engage and take up healthcare space, albeit a focus on a particular type of educational space. The research found that age does have an impact on CPD engagement. Younger (39 or under) nurses reported a sense of inequality in terms of being able to access CPD compared to older colleagues. The younger nurses also seemed to be less engaged in CPD around enhancing knowledge. Current research in the UK has highlighted disparate numbers between older and younger nurses, with larger numbers of older nurses due for retirement, and as a consequence the retention of older nurses is now a priority, so that their experience, knowledge and skills do not disappear (Storey et al 2009).

A study commissioned by the General Medical Council and carried out by Mather et al (2012) to assess the impact of CPD on doctors' performance and patient/service user outcomes using case studies, evidenced benefits to CPD impact. The data analysed comprised measurement of both qualitative and 'hard' (statistical) outcomes and resulted in varying degrees of significance. The study identified a general understanding that considers CPD as beneficial, but also recognises that demonstrating that benefit is challenging.

Findings showed that increasing skills and knowledge was an impact explicitly felt by practitioners, as well as a sense of increased personal confidence and awareness through better use of reflective practice. Benefits beyond this were less well acknowledged or perceived by practitioners.

Through qualitative phenomenological research Gunn and Goding (2009) established evidence that CPD has a positive impact on practitioner (community based physiotherapists) confidence and competencies, and that this positivity was beneficial in building better therapeutic relationships with patients and service users, as well as improved communication among practitioners. The practitioners were found to be enthused learners with patient benefit at the centre of their strong motivation, but had self-perceived lack of certain skills, such as reflection or portfolio building. The Academy of Medical Royal Colleges (2010) found that practitioners struggled at times to adequately define what reflection is and how it impacts on development, noting that generally it was a challenging concept and practice for medical practitioners. They also indicated that, for practitioners, the implementation of associations between quantifiable CPD and recertification would have a significant impact in terms of shifting perceptions of CPD.

In considering the benefits of workforce development in improving support workers' skills and knowledge, Rycroft-Malone (2014) calls for a synthesis of evidence to better prepare the workforce for the challenges of providing safe, effective, and person centred care; and in particular to older adults because they are the demographic that support workers are increasingly caring for. A lack of existing research in this area means support workforce development is under-facilitated, hence leaving gaps in evaluating and evidencing the impact of any development initiative.

It is acknowledged that deep learning takes place over time and reflective practice has been widely acknowledged by the health professions as a process to integrate learning and practice. Mezirow (1997) emphasises the importance of critical reflection, not only to transformational learning, but also to how it is achieved. Transformational learning theory has enabled an understanding of the processes of how people make meaning and consequently the significance of the critical nature of thinking and knowing (Baumgartner 2001). Many writers assert that robust evaluation of education and training requires longitudinal studies with lengthy follow-up periods, including those that follow the cohorts through the course of their professional programme and out into practice (Ogivil-White 2006; Pollard and Collins 2005; Humphris and Hean 2004; Freeth et al. 2002).

As with impact on service users, the impact CPD has on professionals is most usefully summarised in the form of its enablers, processes, and impact. Enablers have been identified as theoretical knowledge based on ethical principles, work based approaches and inclusive and collegial workplaces. Volume of regulation over CPD is recognised as an inhibitor. Processes that enable CPD purposes include the use of portfolios, shared decision making and facilitation of development. The impact of the enablers and processes on practitioners is classified as ongoing self-critical thinking and reflection on practice, increased confidence, better relationships, updated knowledge, knowledge used in and put into practice (knowledge transfer), increased competence, role clarity, mobility, flexibility and career progression (Manley et al 2009; 2014).

This review next considers literature surrounding the impact CPD has on services, and whilst already somewhat alluded to, looks more explicitly at the impact on provider organisations.

2.5.4. What Impact Does CPD Have on Services and Providing Organisations?

The CIPD (CIPD 2014) identify that most employers see CPD as crucial to development. They use CPD as a means of giving power and focus to a range of human resources development interventions. Employers like staff to take responsibility for their own development and CPD provides the envelope in which a diverse range of development strands may be held together and leveraged for maximum benefit. Organisations in highly competitive sectors also view CPD as a positive means of retaining staff. Staff tend to leave organisations that are not committed to their professional development and go elsewhere.

The majority of employers undertake some evaluation of learning interventions in their organisations. Using information from the Value of Learning research, CIPD (Anderson 2007) developed a model which highlights the importance of demonstrating the value of learning to the organisation in a way that is appropriate to the receivers of the learning and training contribution. It is important to consider the point of view of managers at all levels in order to establish the way forward with the development of relevant and timely metrics for assessing and reporting on the value of learning in a way that reflects the distinctive characteristics of the organisation.

Anderson (2007) identified four main approaches to measuring and reporting on effectiveness (value):

- Learning function efficiency measures.
- Key performance indicators and benchmark measures.
- Return on investment measures.
- Return on expectation measures.

In respect of learning function efficiency measures, for example, there is a need to address important questions such as:

- Is the learning and development (L&D) function delivering operational effectiveness?
- How effectively is the functional capability of the workforce being developed?
- How well are learning interventions supporting critical success factors?
- How do learning operations compare with those of other relevant organisations?

The CIPD (2007) assessment tool *Value of learning: Assessing and Reporting on the Value of Learning to Organisations* helps employers use the training evaluation to assess and encourage the alignment of learning to strategic priorities. Such alignment is key if L&D functions and practitioners wish to ensure links between their efforts and results for the organisation; and if L&D is to be focused, cost-effective and more measurable in terms of valued impact. The tool contains four assessment instruments, designed to:

- Identify the organisation's strategic priorities.
- Check the current alignment of L&D.
- Assess the extent of constructive dialogue about the L&D function's interaction with managers and directors.
- Discover the skills and knowledge required for the alignment process.

In 2007, research on effective healthcare professional teams by Leggat, which involved health service managers participating in a team working survey, identified a mismatch in perceptions about competencies and effective team working between managers (those with organisational responsibilities) and individuals; with individualised approaches installing greater disparity, and therefore more risk of ineffective team working. The Academy of Medical Royal Colleges (2010) has also observed that CPD is understood differently by individuals who are focused on their own development, than by those with organisational responsibilities who understand CPD through a more strategic lens. Leggat's (2007) work identifies the need for different levels of manager competencies and discusses some of the key traits, skills, knowledge and motives involved in informing effective leadership and management, whilst also recognising that these can be socio-culturally dependent. For example, men and women may prioritise skills differently, with women valuing negotiation more highly in comparison to men valuing ability to influence. Women were found to identify self-awareness as a significant trait, with men more likely to consider organisational goals and strategies as a preference. In terms of traits, women valued respect for others highly and men tended towards placing higher value on self-directed learning, although this pattern in accordance with gender was not always observable across management levels. These gender differences reflect well-rehearsed arguments in research around approaches in management.

The strongest data coming from Leggat's (2007) work illustrated that a significant number of management team respondents felt that three key motives were important in supporting effective teams, namely, *commitment to working collaboratively*, *commitment to the organisation*, and *commitment to a quality outcome*. In conclusion, Leggat (2007) suggests that parallel thinking and action that is based on organisational values and principles, such as current and widespread principles of collaborative working, improved quality outcomes and commitment to values and beliefs, provides for more collective approaches for achieving visions and aims. This affirms Manley & Hardy's (2005) emphasis that the impact of education in producing effective teams can be recognised not only through the demonstration of knowledge, understanding and awareness, but also through the demonstration of underpinning principles.

In view of the social cognitive theory, training must be situated within the social context because learning behaviour is a function of the interaction between the learner and their environment (Gibson 2004). The work place environment is an important variable in the evaluation of training, in that, the work climate may either support or inhibit the application of learned behaviours on the job (McCormack et al., 2010; Skinner and Whyte 2009). Skinner and Whyte (2009:375) discovered that *'taking the risks associated with trying out new activities without the active support and commitment of colleagues is a lonely business. The*

constant barrage of operational problems starts to outweigh enthusiasm for innovation'. To achieve the required impact of the training intervention on team culture practitioners need to be trained as whole teams, and that includes senior colleagues (Scourfield 2012).

How organisational outcomes have changed as a result of the training programme is the most difficult training outcome to measure. A UK study by Brown et al. (2008) found that it was harder to define the impact of post-qualifying social work education on the organisation. Although most organisations are willing to invest resources in their employees' CPD, resources are invested on an ad hoc basis without linking CPD firmly and routinely to co-operate objectives. For all service providers, effective staff are their major asset and up-to-date staff their best source of innovation. It makes sense for an employer to invest in CPD, even where return on such investment seems uncertain (Mulvey 2013). It is also true that the uncontrolled non-laboratory setting of organisations makes it almost impossible to isolate the impact of any one program (O'Sullivan 2004).

As with impact on service users and practitioners, and despite looking broadly across the perspectives of health and social care and human resources, there are still significant gaps in research and the development of tools and models that can effectively evaluate what impact CPD has on organisations.

The literature suggests that CPD impact on services and organisations, as organised around enablers, processes, and impact, shows it is facilitated through commitment to learning, commitment to collaborative working, commitment to organisations and commitment to quality outcomes. Self-motivation was also identified as an enabler, as was valuable learning. The processes that enable CPD purposes have been acknowledged as metrics for assessing and reporting, learning function measures, measuring and reporting the effectiveness of value i.e. key performance indicators, return on investment, return on expectations and whole team learning. CPD impact is recognised through better relationships, workforce capability and the achievement of strategic intentions.

This review now turns to offer an awareness of the necessary factors that enable meaningful and effective CPD. Looking at research and literature around those enabling factors can reveal how vital enabling constituents are to successful health care CPD.

2.5. Theme 3: Facilitating and Judging the Effectiveness of CPD

Critical Questions

- **What are the enablers and processes by which CPD learning occurs?**
- **How are these related to educational theory and philosophy?**
- **What methodology and methods have been used to evaluate and measure the impact of CPD?**
- **What does current evidence tell us about gaps in measuring impact and why?**
- **Why is a whole systems approach to CPD at individual team and organisational level?**

In this section of the review we focus on the enablers and processes for facilitating CPD learning and development and link these to educational theory and philosophy in order to begin to construct a whole systems approach to CPD at individual, team, organisational and societal level.

2.5.1. What are the Enabling Factors and Processes by Which CPD Learning Occurs?

This section establishes the enablers of effective CPD as including self-confidence, reflective practitioners, ongoing learning and patient-centred learning, as well as facilitation of learning.

Enabling factors for effective CPD and processes for enabling CPD purpose are recognised and reported within the broad literature base, although investigations and explorations of enablers does not seem to be an area heavily represented. What does exist, however, indicates the considerable significance enablers have towards the facilitation of successful and effective CPD; and so going forward, it is critical that such factors play a pivotal role if CPD impact is to be effectively enabled and sustained.

Identifying enablers with the processes of learning and development allows for an understanding of the possible mechanisms through which CPD learning is achieved. Enablers such as collaborative environments and partnership working across all levels, flexible learning opportunities, workplace learning cultures, peer support, ongoing support, personal and professional motivations, self-confidence, equitable access and opportunities and recognising and valuing parallel knowledges, all need to be facilitated through particular processes in order to make them achievable (Phillips 2012). Manley et al (2009) identify the importance of positive workplace learning cultures, partnership working across all levels, professional and academic accreditation, locally informed bespoke programmes, alignment to organisational strategy and provision of time and financial resources as being important enablers. Lee's (2011) work on CPD impact measurement identifies that peer support, positive peer attitudes and ongoing support are enablers that enhance positive change. For many practitioners policy and targets are less important than personal motivation and initiative as enabling factors. Mathers et al (2012) suggest provision of protective time and improved planning on the part of individuals are enablers that could negate time barriers that hinder learning implementation. Landor (2011) corroborates that time is a significant factor for enabling CPD.

The processes identified through which this happens are linked to learning strategies that seek to empower, enable and positively change (Casey 2012), because their underlying philosophy is to:

- Transform individuals to become self-directing, resilient self-sufficient lifelong learners that drive their own learning.
- Translate and use knowledge in practice, blending it with other knowledge's to enable safe and effective practice to be experienced by service users in a person centred way.

- Transform ways of working so different staff groups work together become effective teams with integrated whole systems ways of working recognised by flexibility and team competences.
- Transform cultures so that workplaces live shared values and very one flourishes.

The impact and outcomes of the enablers and processes comprise increased efficiency, effectiveness, innovation and revalidation, as well as effective and sustained learning and relationships of trust. Research around enabling and hindering factors to effective CPD is sparse and indicates that more work is needed to heighten awareness of the considerable bearing that these have.

Table 3 CPD Enablers, Processes and Outcomes

Enablers	Processes	Outcomes
<ul style="list-style-type: none"> • Self-confidence, reflective practitioners • Ongoing learning • Patient-centred learning • Facilitation of learning • Peer support • Positive peer attitudes • Ongoing support • Personal and professional motivations • Collaborative environments • Flexible learning opportunities • Access to learning materials • Partnership working • Work place learning cultures • Equitable access and opportunities • Recognising and valuing parallel knowledges 	<ul style="list-style-type: none"> • Investment in individuals' CPD • Flexible less regulated approaches to learning • Participatory and learner centred approaches • Small group learning 	<ul style="list-style-type: none"> • Increased efficiency and effectiveness innovation revalidation • Effective sustained learning • Relationships of trust • Motivated satisfied and positively developed practitioners

Bullock et al's (2010) case study of dentists also identifies CPD barriers, but if these barriers are reversed they become enablers of learning, hence provision of consistent equitable CPD opportunities, provision of time and consensus of the value of CPD are all important. In terms of workplace learning culture that recognise and value diversity, Lamminatakanen and Kivinen (2012) call for managers to consider how to facilitate CPD in such a way that it provides opportunities for parallel knowledges to be encountered and learnt from. Engagement in CPD was enthusiastic and a driver for change and transformation, as well as something that enables and maintains competency, job satisfaction and performance on a number of levels; but practitioners' perceptions of equity were important as a factor for assuring this.

The issue of equity of access to CPD is also evident in the work of Hughes (2005) who has written on nurses' perceptions for continuing professional development as an inhibitor rather

than enabler. It also highlighted that career progression was a motivating factors for undertaking CPD, as was an understanding that it would result in improved care and skills.

Effective partnerships between employers, individuals and educators, as within healthcare, is an essential enabler in providing positive support, and flexibility in studying contributing to a more absorptive capacity and successful learning (Taylor et al., 2010; Scourfield et al., 2012; Brown et al., 2008; Doel et al., 2008).

White's (2009) work highlights self-confidence as a key enabler, recognising three attributes to self-confidence (belief in positive achievements, persistence, and self-awareness). Self-confidence is seen as an enabler for change and transformation and thus education needs to nurture its attributes in order to develop self-confident practitioners.

The human resources and organisational development perspective (CIPD) understand CPD as enabled through:

- Realistic assessment of what needs to be learnt in order to meet the demands of the ever-changing professional and business worlds.
- Development being owned and managed by the individual, learning from all experiences, combined with reflection as key activities.
- Working effectively and inclusively with colleagues, clients, stakeholders, customers, teams and individuals both within and outside of the organisation.
- Regular investment of time and learning is seen as an essential part of professional life, not as an optional extra.

Processes that enable the purposes of CPD include, participatory and learner centred approaches and small group learning as highlighted in Phillips' (2012) integrative review of rural base nurse CPD. Manley et al's (2009) concept analysis of current health care education and practice suggests a number of significant processes similar to Phillips (2012), but also includes the importance of nurturing praxis, reflexivity and creativity in underpinning learning and teaching approaches. In terms of creating and sustaining supportive organisational structures they suggest supportive facilitation of learning,

In summary, the literature has illustrated that enablers of CPD include commitment to lifelong learning and self-motivation. The processes which enable CPD are facilitation to engage in CPD, a continuing process of learning and learning activities and learning environments through which healthcare workers can maintain and develop their knowledge and skills throughout their careers. The outcomes from the enablers and processes are motivated, satisfied and positively developed healthcare workers who take ownership of their knowledge, skills and experiences. Safe practice and effective practice in an evolving scope of practice and commitment to lifelong learning are also highlighted as outcomes, as are the different levels of outcomes for individuals, groups/teams and organisations.

2.5.2. What are the Learning and Development Approaches That Enable the Purposes of CPD to be Achieved?

Earlier in the review we identified four key purposes of CPD as enabling individual transformation and professional growth, developing knowledge and skills to meet society’s changing needs, getting knowledge and research into practice to improve the standards of patient care and using knowledge to create positive learning in the workplace to transform the wider team. The review links these purposes with levels of impact drawn from the literature in Table 4 below.

Table 4: CPD Purposes and Levels of Impact

Purposes of CPD	Levels of CPD impact drawn from the literature
<ul style="list-style-type: none"> • Transforming professional practice: • Maintain and develop knowledge, skills, and competency through commitment to lifelong learning • Better service user experience and outcomes 	<ul style="list-style-type: none"> • Individuals: <ul style="list-style-type: none"> i. Healthcare workers ii. Service users
<ul style="list-style-type: none"> • Bringing about social change through learning and achieving social values in the workplace 	<ul style="list-style-type: none"> • Teams • Groups
<ul style="list-style-type: none"> • Updating, developing and using knowledge in the workplace for safe and effective care 	<ul style="list-style-type: none"> • Services • Organisations
<ul style="list-style-type: none"> • Useful to the changing needs of society 	<ul style="list-style-type: none"> • Society

Understanding more about how particular educational approaches can successfully underpin CPD to deliver on its purposes and positively influence outcomes and impact, will demonstrate another key constituent necessary for effective CPD. This review explores these now by utilising a table format to illustrate how different educational approaches can be associated with transformation (Table 5).

Understanding more about how particular educational approaches can successfully underpin CPD to deliver on its purposes, and positively influence outcomes and impact, will demonstrate another key constituent necessary for effective CPD. Therefore the literature review presents an integrative illustration of how four educational schools of thought and different educational approaches can be associated with transformation (Table 5). This demonstrates the CPD Impact Tool has a strong philosophical and theoretical foundation. We drew on the expertise of our International Expert Reference Group and educational theorists at Canterbury Christ Church University to develop this framework.

If the primary purpose of CPD is to focus on transformation of the individual practitioner's professional practice, then the philosophy of progressivism is applicable. Drawing on the educational theories of Dewey (1938), Rogers (1983) and others the focus of CPD learning is on facilitating learning that enables the individual practitioner to achieve their full potential through a voyage of experiential discovery (Morrison & Ridley in Preedy 1989). CPD is therefore learner-driven using the workplace as the focal point for learning, development and inquiry and improvement, trying out new methods through a process of active and action learning to promote critical reflection and raise awareness of personal strengths and areas for development.

If the primary purpose of CPD is to focus on transformation to bring about social change within the workplace then learning needs to be socially relevant and focus on developing problem skills as a catalyst for social change. The philosophical traditions of constructivism and democratic liberalism are applicable (Morrison & Ridley in Preedy 1989). Drawing on the educational theories of Piaget (2001), Vygotsky (1978) and Brunner (1977) the focus of CPD learning is on providing equity of opportunity to promote active learning and inquiry for individual and team growth and development through skilled facilitation in the workplace.

If the primary purpose of CPD is to focus on the development on updating of knowledge and skills through more formal mechanisms of scholarly learning to focus on competence then the philosophies of classical humanism and perennialism apply. The educational theories of Aristotle (1987) and Adler (1987) identify that the focus of learning is on pursuit of intellectual gain, seeking enduring truths and constancy of ideas. This is very often described as learning for the sake of learning because of the need to demonstrate competence or skills e.g. mandatory training updates and professional revalidation. However, it also relates to the way in which practitioners blend and meld different forms of knowledge to improve practice in the workplace and being able to make judgements about knowing how to access and make judgements about the value of that evidence to improve practice.

CPD that focuses on the development of skills to meet society's changing needs is based on the philosophy of instrumentalism and utilitarianism (Morrison & Ridley in Preedy 1989; Dewey 1938) associated with the demonstration of professional competence to provide high quality of care in the workplace. CPD may be formal or informal but largely relates to mandatory training required to maintain knowledge and skills to provide safe and effective care e.g. basic life support and moving and handling.

Table 5: Educational Approaches Informing CPD – Identifying the Need for Complex Multi-faceted Strategies as Proposed by Beattie (1987)

Purpose of CPD	Underpinning philosophical approaches to education, learning and development Approach/main theorists	Focus content/process	Outcome	Evaluation Focus	Key theorist	Implications for CPD	Indicators of Effectiveness
Transforming professional practice	Progressivism – Experiential/discovery learning where the teacher is a facilitator of learning towards developing learners' full potential (Morrison & Ridley in Preedy 1989)	Learner driven/centred (learners individual needs) Process focused ' Learning by doing' and experience Critical reflection/mindful experiences – WBL/WPL Problem solving – driven by students interests	Action, change & transformation in practice	Changes in practice: ❖ Meaningfulness ❖ Confidence ❖ Self-efficacy ❖ Career progression	Dewey (1938); Rogers (1983); Froebel (1826); Pestalozzi (1894); Montessori (1949)	TRANSFORMATION OF INDIVIDUAL PRACTICE <ul style="list-style-type: none"> Learning by doing requires support in the workplace to provide opportunities for practising and also processing of learning through reflection and supervision. Requires skilled facilitators of learning, development and inquiry 	Individual <ul style="list-style-type: none"> - Self awareness - Self confidence - Self-motivation - Emotional intelligence - Critical reflection/ thinking - Role clarity - Person centred practice - Compassion - Active lifelong learning - Career progression & personal growth - Positive attitude to change - Skilled & competent - Active listening/ communication - Speaking up for human rights - Role Model - Using evidence systematically - Positive impact on patient experience - Positive carer outcomes - Creative problem solving
CPD as Bringing about social change through learning and achieving social values in the workplace	Re-Constructivist/ critical theory/ Democratic liberal humanism – Socially relevant problem solving vocational learning as a catalyst of social change with extrinsic worthwhileness	Process focused <ul style="list-style-type: none"> society and society values e.g. Democracy Individual personal growth & development as citizens through LLL Bringing about social	Better citizens Better context an society	Personal growth Change in society	Dewey (1938) Constructivist: Piaget (2001); Vygotsky (1978); Bruner (1977) Critical Theorists: Habermass (1981); Horkheimer (1972);	TRANSFORMATION OF WORKPLACE /CONTEXT <ul style="list-style-type: none"> Implementing health values Developing the processes of experiential learning , using the workplace as 	Team indicator <ul style="list-style-type: none"> - Role clarity & responsibility - Shared vision & values - Interdisciplinary team working - Person centred team culture - Collaborative decision making

Purpose of CPD	Underpinning philosophical approaches to education, learning and development Approach/main theorists	Focus content/process	Outcome	Evaluation Focus	Key theorist	Implications for CPD	Indicators of Effectiveness
	(Morrison & Ridley in Preedy 1989).	change Learning is social and interactive Role of teacher as a facilitator of learning relationships			Adorno (1972); Marcuse (1969) Liberal humanists: Huxley(1971)	a resource for learning, active inquiry, continuous development, improvement and learning e.g. through reflection and inquiry • Facilitation learning and achievement of social values	-Effective team communication - Motivated, satisfied, & positively developed team - Equitable access and opportunities - Positive learning culture - High challenge & support - Innovation & creativity - Peer learning & review - Commitment to lifelong learning - Skilled facilitation of others - Systematic use of evidence to inform practice
CPD as updating, developing and using knowledge in the workplace	Liberal/classical humanist Perennialism – Academic non-vocational high culture formal learning with intrinsic worthwhileness (Morrison & Ridley in Preedy 1989).	<ul style="list-style-type: none"> Pursuit of intellectual gain, everlasting truths, great ideas that are perennial Seeking enduring truths and constancy of ideas Learning for sake of learning <p>Content Focused Science and scholarship Role of teacher – expert</p>	Individual intellectual gain General development of the mind Endorsed social hierarchies and transmitting cultural heritage	Knowledge Acquisition Use of logic and understanding	Aristotle (1987) Adler (1987)	TRANSFORMATION OF KNOWLEDGE /KNOWLEDGE MOBILISATION <ul style="list-style-type: none"> Knowing and accessing the evidence about key topics and the quality of the evidence and what this means is one thing But health care staff need help using, implementing and blending different types of evidences in the workplace 	Service Indicator <ul style="list-style-type: none"> - Shared vision & purpose for service - Person centred culture - Effective levels of staffing - Patient safety metrics - Improved patient flow & discharge - Integrated working - Patient at heart of decision making - Systematic mechanism for capturing <ul style="list-style-type: none"> • Best and poor practice • Patient experience • Reviewing and improving standards

Purpose of CPD	Underpinning philosophical approaches to education, learning and development Approach/main theorists	Focus content/process	Outcome	Evaluation Focus	Key theorist	Implications for CPD	Indicators of Effectiveness
CPD that is useful to the changing needs of society	Instrumentalism/ Essentialism – Utilitarian practical/training learning relevant to the economic good with extrinsic worthwhileness (Morrison & Ridley in Preedy 1989).	Usefulness in society <ul style="list-style-type: none"> Rationale for learning Includes technical vocational skills and also being adaptable to the changing needs of society product/content related. A skilled workforce with vocational skills and also adaptable to the future Usefulness for future employment KPIs Skills Competences of workforce Develop life skills as well as practical skills	Social/economic Person-centred Safe Effective care employability	Indicators of person centred: <ul style="list-style-type: none"> ❖ Safe care ❖ Effective care ❖ Employability ❖ VFM 	Dewey (1938)	TRANSFORMATION OF SKILLS TO MEET SOCIETY'S CHANGING NEEDS <ul style="list-style-type: none"> Safe and effective practice Employability and career progression Mandatory training Substitution 	Organisational Indicators <ul style="list-style-type: none"> - Shared purpose framework - Shared values - Inclusive culture - Commitment to LLL - Quality metrics - Effective use of resources - Compliance with national standards - Whole systems working - Systems for shared governance - Good partner relations - Creativity and Innovation - PPI and public trust - Organisational awareness & intelligence

2.5.3 Methodology and Methods for Evaluating CPD

There is as yet no universally used systematic approach to evaluating CPD in health and social care. The key challenge in the evaluation of CPD is delineating the extent to which any changes are as a result of the learning alone or other less formal support (Marvin et al 2010). Poor research designs impede the generation of a solid evidence base for education and training (Carpenter 2011; Lee 2010). This section of the review examines the methodologies commonly used to evaluate the impact of CPD. The review looks firstly at the “Why” of evaluation before turning to the “How” question.

2.5.3.1. Why is it Important to Evaluate CPD?

Gallagher (2007) and Gibbs (2011) acknowledge that it is necessary for learners to have a clear understanding of the benefits of continuing education, and for CPD to be delivered with underpinning principles of learner enablement. This, Gibbs (2011) argues ensures that proactive accountable behaviour forms part of what the learner/practitioner is, and then logically that they impart the same empowering principles to patients/service users towards improved health outcomes.

Easterby-Smith (1994) devised four main strands for the purposes of training evaluation:

1. *Proving* – that the training worked or had measurable impact in itself. This aim is addressed under the instrumentalist ideology which views education as having a much more purposeful application. Instrumentalism is reinforced by an understanding that learning and content is for the purpose of social and economic outcomes (Beattie 1987).
2. *Controlling* – for example, the time needed for training courses, access to costly off-the-job programmes, consistency or compliance requirements
3. *Improving* – for example, the training, trainers, course content and arrangements. This is backed by the liberal humanist approach, which characterises learning simply for the sake of learning and that the pursuit of knowledge is for intellectual gain, with no suggestion of any practical application of that knowledge (Beattie 1987). The ideology describes a quest for intellectual development, with education/ training emphasising mostly curriculum content and knowledge intended for propagation (Pendleton & Myles 1991).
4. *Reinforcing* – using evaluation efforts as a deliberate contribution to the learning process itself.

It is important to ensure that programmes continue to meet standards of delivery, are successful in meeting their aims and objectives and are making impact on practice (Brown et al., 2008). In view of the elements raised by Easterby-Smith (1994), it is important to evaluate CPD in health practice to:

1. *Evidence that CPD contributes to patient experience, outcomes and quality of care*

(Gallagher 2007) maintains that education and training have an impact on the quality of healthcare, particularly on improving patient care and experience. The study by Mathers et al (2012) found that it is a general belief that in most cases health care professionals' participation in CPD improves practice and performance although practitioners who took part in this particular study were not able to demonstrate how. Recommendations in respect to the importance of and perceived need for training and education may be persuasive but evidence that it works remains elusive if the effectiveness of education and training programmes is not established (Moriarty 2013). Jordan (2000:462) states that "*empirical examination of the knowledge underpinning practice will provide a more secure foundation for the health care curriculum than the opinions of professionals*"

2. Assess the effectiveness of CPD provision

Evaluating learning and development is crucial to ensuring the effectiveness of an organisation's learning initiatives and programmes. The evaluation process involves formal or informal assessment of the quality and effectiveness of an employer's training and learning provision, usually either by some measure of the merit of the provision itself (the input- for example the quality of course content and presentation) and/or by monitoring its impact (the outcomes- for example improved skills/qualifications or enhanced productivity/profitability) (CIPD 2014).

Stakeholders evaluate training outcomes in terms of what they expect to be able to do after undertaking the intervention. The rationale behind this is that the success of the intervention is assessed by looking at the extent to which expectations have been met (Marvin et al 2010). For example, Silvester et al (1994) evaluated a culture change programme in a large engineering company and found that while all three key stakeholder groups (managers, trainers and trainees) considered that the programme would produce positive outcomes, there were important differences of view:

- The trainees were most optimistic – perhaps because of receiving attention and the chance to learn new skills, though not necessarily to be involved in the apparent push to change the organisational culture.
- The trainers were the most cynical – probably through harbouring doubts about their ability to bring about lasting change through a single form of intervention.
- The managers were the most pessimistic – mainly through belief that the training was all about quality not culture, and that it would thrive only in some areas.

It is clear from the above that focus on evaluating training input alone may miss the point about valuing learning outcomes and may also neglect any consideration of a wider raft of interventions, strategies and expectations that encourage learning. CIPD (2014) suggest that a firmer focus on learning outputs should result in a self-directed, work-based process leading to increased adaptive potential in the long run.

3. Enable measurement of value for money and return on investment

In the UK, health and allied agencies are allocating substantial and increasing fiscal resources to improve levels of professional competence amongst their workforce through funding and providing educational and training opportunities at different levels (DoH 2006; Ogilvie-Whyte 2006). Given the huge investment in developing strategies for training, Mann (1996) asserts that focus should be on the value and effectiveness of CPD. The lack of evidence of the effectiveness of CPD undermines confidence in the value of training and education.

The process of learning and development evaluation might be undertaken across an organisation as a whole or for a particular part of the organisation or some group within it – for example, in respect of employees identified as ‘talent’ (that is, exceptionally high-performing or high-potential individuals) (CIPD 2014). CIPD reckon many organisations work to develop their staff’s strengths, and therefore the term ‘talent’ may be used to encompass the entire workforce of an organisation. In their assessment tool ‘value of learning: assessing and reporting on the value of learning to organisations’, CIPD (2007) demonstrate that assessing and reporting the value of learning to organisations helps employers to align learning to strategic priorities. Such alignment is useful if practitioners wish to ensure links between their efforts and results for the organisation; and if learning and development is to be focused, cost-effective and more measurable in terms of valued impact.

Outcome data is essential for effective purchasing in healthcare, but the evidence necessary for decision making in CPD/ CPE is not available (Davis et al. 1992; 1995). There is a growing need for HR professionals to be able to provide performance measures for the activities that they carry out (Mulvaney et al, 2006) and particularly for those where there are direct cost implications, for example providing learning and development interventions (Marvin et al 2010).

Set against the backdrop of the UK economic recession, and cognisant of the need for a more flexible responsive workforce as the population demographic evolves, the study by Gibbs (2011) highlights that the provision of current CPD can no longer continue and needs to be reviewed. Providers, receivers and commissioners need to be strategic, creative and innovative about identifying learning opportunities. Without greater consideration of the effectiveness and cost effectiveness of the different forms of CPD, piecemeal approaches to CPD will persist (Moriarty 2013).

2.5.3.2 How Can CPD be Evaluated to Determine its Impact?

What is evaluated in CPD depends on what the purpose of CPD is considered to be. In the previous section purposes have been derived from the literature and also aligned to outcomes and impact at different levels, from the individual level through to the organisational and societal. This section explores how CPD has been evaluated in the literature.

Gibbs (2011) emphasises that it is important to be clear about what CPD needs to do and how it can be done sustainably. Effective CDP aims to deliver practical gains to the workplace and to enable practitioners to transfer their new knowledge and skills to the benefit of all key stakeholders (Marvin et al 2010). In other words effective CPD involves both “learning” and being “fit to practise”, knowing both the “why” and the “how”, and putting

learning into practice (Schostak et al 2009). Learning happens as a complex process that is dependent on multiple factors and impacts (Eraut 2000; 2005), and especially so for healthcare workers whose learning straddles across practice as well as formal educational settings. The merits of reflective and instrumental learning in the context of CPD justify the need for measuring value added through evaluating its effectiveness (Roessger 2013).

Evaluation should be built into the training process (Marvin et al 2010) but Giangreco et al (2009) caution that this should be done carefully so that evaluative aspects do not appear to be the main focus and distract the content of programme(s). Goodall et al (2005) point to the challenging nature of the context, purpose, processes, and outcomes of CPD arising from the dynamic interaction with learners' own implicit and explicit, conscious and unconscious learning and development needs, which are always defined by individual, organisational and environmental factors. What is learned from a learning activity or experience may be different from that which is intended to be learnt. However if well developed, the evaluation processes should track multiple changes and different levels of impact in relation to the CPD focus (Goodall et al 2005).

Goodall et al (2005) stipulate that effective evaluation of CPD serves to answer two major questions: i) does the CPD programme/ activity improve outcomes, and ii) how can the CPD programme/ activity be improved (Goodall et al., 2005). Skills for Care (*an employer-led workforce development body for adult social care in England*) learned from their 2012/13 case studies that it is good practice for employers and practitioners to consider the following questions before and after any CPD activity.

Before:

1. What objectives are CPD designed to meet? (i.e. the rationale for undertaking the CPD activity e.g. meet organisational and/or professional requirements).
2. What is the expected impact of the CPD? (i.e. what changes/improvements are expected to be seen in service delivery and the practitioners' professional practice?).
3. What are the likely outcomes in terms of impact on practitioner skills/knowledge and outcomes for service users?
4. How can the above be measured (i.e. what evidence will be used to determine impact? over what timescale?). How will this feedback into performance management processes and organisational planning?

After:

1. What evidence is there that the CPD activity has had an impact?
2. Has the CPD activity had the intended impact on the service and practitioners' professional practice and confidence?
3. Were there any unexpected outcomes?
4. How can the CPD activity be followed up to maximise its benefit?

(Skills for Care 2012/13).

2.5.3.4. Methods of Evaluation

This section presents the most commonly cited forms and methods of evaluation cited in the literature.

The Kirkpatrick's model of training evaluation

Kirkpatrick's (1967) approach is the most widely used model to evaluate learning outcomes. The model measures student reactions to training (level 1); what students have learnt (level 2); whether what the student has learnt has been applied to practice (level 3); and whether the application of training is achieving results (level 4).

Many researchers have adapted Kirkpatrick's (1967) approach to make it more relevant for evaluating explicit training and education (Robinson and Webber 2013). In their review of the models and effectiveness of service user and carer involvement in social work education, Robinson and Weber (2013) mapped 29 studies using a modified version of Kirkpatrick's framework for the evaluation of the training intervention. Their version retained the four level compositions, but combined the framework used by Carpenter (2011) that adjusted for social work education with Morgan and Jones (2009) and which accounts for service user and carer involvement, as demonstrated in table 4.

Table 6: Framework for Evaluation of Educational Programmes

Level	Perceptions	Description of perception	Context of perception
Level 1a	Learner perceptions	Students' views on their learning experience and satisfaction with the training.	Including: emotional reaction (enjoyment), perceived value and difficulty of the training (Warr and Bruce 1995).
Level 1b	Service user or carer perceptions	Service user or carer views on their involvement experience.	
Level 1c	Staff perceptions	Staff views on involving service users or carers.	
Level 2a	Modification in attitudes and perceptions	A measured change in attitudes or perceptions towards service users or carers, their problems, needs, circumstances or care.	Cognitive (knowledge retained), skills based (demonstrated) and Attitudinal (motivation & confidence to use skills) outcomes (Kraiger et al., 1993).
Level 2b	Acquisition of knowledge and skills	A measured change in understanding the concepts, procedures and principles of working with service users or carers, and the acquisition of thinking/ problem solving, assessment and intervention skills.	
Level 3a	Changes in behaviour	Observation of whether the newly acquired knowledge, skills and attitudes are evident in the practice of the social worker.	Focus is on training effectiveness rather than evaluation. Can participants use their new knowledge and/ or
Level	Changes in	Observation of wider changes in the organisation/delivery of care, attributable to	

Level	Perceptions	Description of perception	Context of perception
3b	organisational practice	service user or carer involvement in an educational programme.	skills in the work place?
Level 4	Benefits to users and carers	Assessment as to whether there is a tangible difference to the well-being and quality-of-life of service users or carers who receive social work services.	Examples of results might include: productivity, customer satisfaction, efficiency, morale and profitability (O'Sullivan 2004).

Cited in Robinson & Webber (2013) as adapted from Carpenter (2005) and Morgan and Jones (2009); original framework devised by Kirkpatrick (1967).

Sargeant et al (2011) identified and evaluated an educational evaluation hierarchy (Figure 6) by citing the work of Barr, et al (2005), Kirkpatrick (1967), and Moore (2003, 2009). The hierarchy addresses the EOF Excellent Education (EE) domain whilst also attending to the Competent and Capable Staff (CC) domain as it looks to evidence the link between competency and education. Sargeant et al suggest that Moore (2003, 2009) provides a more sophisticated model than Kirkpatrick (1967) or Barr et al (2005) that could be particularly useful for evaluating CPD. This is due to its recognition of different and evolving levels of competency and knowledge, and the initial participation level better reflects the CPD context. The Moore (2003, 2009) model's focus on performance rather than behaviour is more commensurate with CPD, and the inclusion of evaluation of patient and community outcomes makes it far more appropriately aligned to a professional healthcare setting.

Figure 6: Sargeant et al's (2011) Evaluation Hierarchy

Barr, et al (2005)	Kirkpatrick (1967)	Moore (2003, 2009)
1. Reaction	1. Reaction (satisfaction)	1. Participation
2. Learning	2. Learning	2. Satisfaction
a. Modifications of perceptions/attitudes	a. Knowledge	3. Learning:
b. Acquisition of knowledge/skills	b. Skills	a. Declarative knowledge
3. Behavioral change (in workplace)	3. Behavior (transfer of learning to workplace)	b. Procedural knowledge
4. Impact	4. Results (transfer or impact on society)	c. Competence
a. Change in organizational practice		4. Performance (in practice setting)
b. Benefits to patients/clients		5. Patient health
		6. Community health

Despite the recognition of Moore's (2003, 2009) overarching, yet contextually useful model of educational outcome evaluation, it is not cited widely in research papers and journal articles exploring the impact of CPD. This may be explained by the lack of evidence on the evaluation of CPD.

The Kirkpatrick's model (1967) of training evaluation is mostly criticised for the weak relationships that exist between the levels. Each level is neither definitely nor always linked positively to the next (Nickols 2005; Alliger and Janak 1989). The self-assessment measures generally used to assess the impact of training at levels 1 and 2 of Kirkpatrick's approach

are less likely to incur honest responses from participants, which raises questions about the validity of the information gathered from using instruments of this sort (Carpenter 2011; Ogilvie-Whyte 2006). For example Vitali (2011) found no significant correlation between students' self-ratings and practice educators' ratings of performance in relation to social work competences. Carpenter (2011) posits that greater confidence in the use of this method would be provided by demonstrating that self-ratings were associated with independent ratings by supervisors.

Attention is normally focused on evaluating training at the reactions level because of the difficulties and time costs of measuring the other three levels (American society for Training and Development 2012). Effective evaluation means going beyond the traditional 'reactions' focus based on a simplistic assessment of learners' levels of satisfaction with the training provision. Phillips built upon Kirkpatrick's model by adding a fifth level that focuses specifically on return on investment (Phillips and Phillips 2008).

Return on Investment (ROI) Evaluation

Return on investment quantifies the relation between the benefits of a program and its costs (Phillips and Phillips 2008). Before the training intervention, data is collected to identify the organisation's performance deficiency and after the training, the return on investment is calculated concentrating on the identified performance area. The ideology behind this approach to evaluation is that training is an investment and the payback should be in terms of profit (Smith and Piper 1990). CIPD (2014) identified constraints of this approach to include:

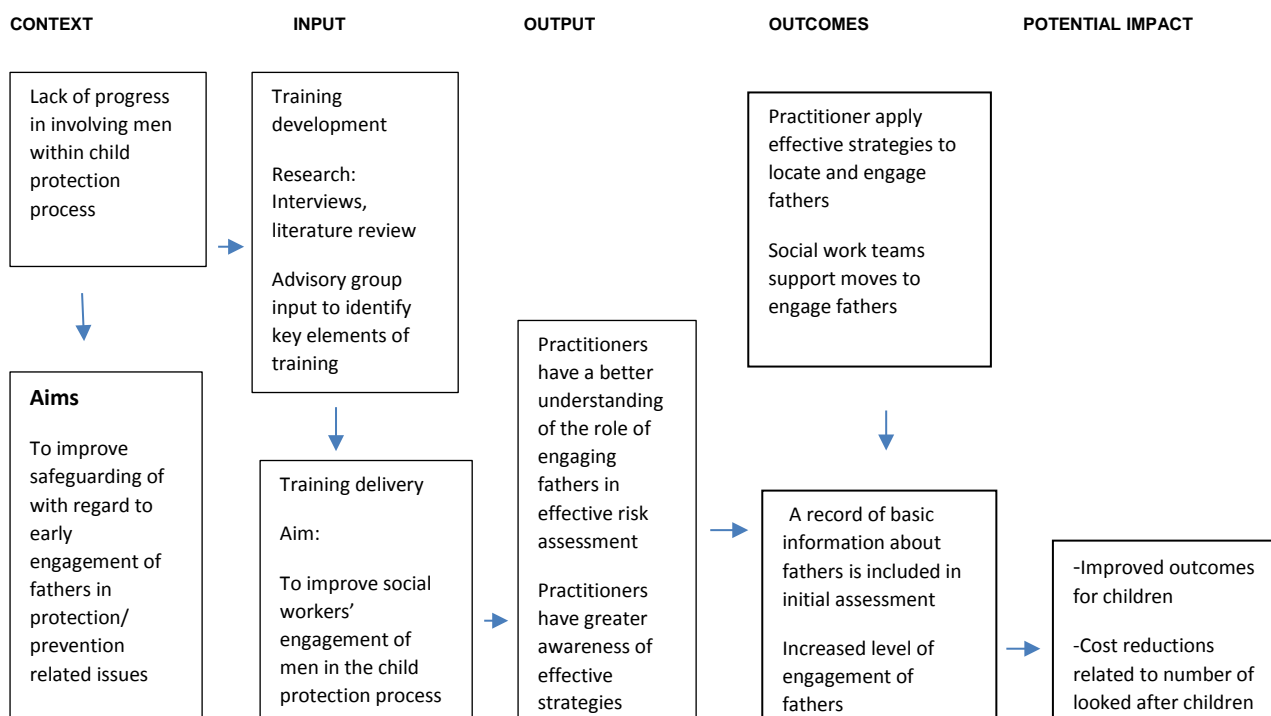
- Its primary focus on the training intervention rather than any planned, concurrent activities or coincidental factors that boost ongoing learning output and outcomes.
- Lack of applicability where practitioners want to determine the return on training over time as the approach provides a snapshot at only a single point in time.
- It is only post-project and fails to build from a baseline.
- Its calculations can look superficially impressive when a small cost learning intervention is set against a big project cost

Realist Evaluation

Evaluation needs to examine what happens, *why* it happens and in *what circumstances* (Ogilvie-White 2006; Skinner and Whyte 2004). Realistic evaluation is driven by theory with hypotheses about mechanisms and the influence of variations in context at the centre of the evaluation. Creswell and Plano-Clark (2011) recommend Pawson and Tilley's (1997) to be a more realistic research approach to evaluating the impact of CPD with complex processes. The model recognises the multiple challenges of undertaking evaluation in a social world, and how these can be overcome by the philosophy of realism which takes into account explanatory elements taking place in the social world that are overlooked and excluded by an experimentation approach. CIPD iterate with an emphasis the need to focus on learning outcomes, which may be broadly defined as some permanent or long-lasting change in knowledge, skills and attitudes, and which is an output or outcome, rather than on any training itself, which is an input (CIPD 2014).

Scourfield et al (2012) adopted Pawson and Tilley's (1997) evaluation framework (shown in figure 7) to assess the program effect in terms of short term outputs, interim outcomes and long term impact of a training course for social workers on engaging fathers in child protection. The authors used theory and evidence in literature underlying the rationale for the intervention to shape and develop the training (the input). The evaluation looked at the causal relationships between context-input-output-outcomes-impact, to arrive at an understanding of the combination of factors that resulted in intended and unintended effects.

Figure 7: Logic Model by Sourfield et al (2012)



EVALUATION

INPUTS What amount of time/money was invested? How many sessions were actually delivered? **OUTPUTS** Who/how many attended? Did they attend all the sessions? Were they satisfied? Did knowledge/confidence increase? To what extent? For whom? Why? **OUTCOMES** Was learning gained from the course applied to practice? What were the consequences? To what extent did father engagement improve? **IMPACT** Does this result in more effective risk management, improved outcomes for children, reduced costs?

This is deemed as a more practical approach of evaluating the effectiveness of CPD as it examines what causes change in different contexts and facilitates exploration of how and for whom the programme works (Tilley 2000). Nonetheless, Pawson and Tilley's evaluation model is not without shortfalls. Greenhalgh et al (2009) found it more difficult to articulate mechanisms of change for different activities at the frontline and in real time than it is cited in textbooks. The authors generated ambiguous accounts both from interviews with frontline practitioners and from interpretation of their actions about what they were trying to achieve and how. Greenhalgh et al (2009:412) concluded that investigators "*must anticipate—and learn to tolerate—the mismatch between the realist evaluation's assumption that a set of more or less well-defined 'mechanisms of change' can be articulated and tested and the empirical reality in which these mechanisms may prove stubbornly hard to detect*".

Other Approaches to Evaluating CPD

In 2012/13 Skills for Care worked with employer partnerships to produce case studies and resources which demonstrate how the core principles to advance the workforce can be applied to practice. The eight employer development sites that participated in this initiative also tested models of assessing the impact of CPD on professional practice. Two of the participating sites felt that the Wisconsin and the Benefit Realisation models were more practical to use.

Carpenter (2011) advocates for experimental or quasi-experimental designs to accumulate evidence of the impact of education and training so that the public and policy makers can be confident that their investment is producing a high quality workforce. Time series designs are most favoured (Grant and Stanton 2001; Punnonen 1995; Shin and Haynes 1993; Corner and Wilson- Barnett 1992) because they allow any transient 'feel-good' factor to lapse and give practitioners time to either implement or forget their new knowledge. On the contrary, Tilley (2000) argues that experimental models of evaluation fail to effectively identify why interventions work differently across different contexts as opposed to realist evaluation that seeks to find the contextual conditions that make interventions effective, therefore developing lessons about how they produce outcomes to inform policy decisions. Draper and Clark (2007) promote multidimensional approaches to obtain varied and multiple perspectives and to enhance methodological rigour.

The needs and objectives of the different stakeholders usually determine the choice of methods and instrument (s) used to evaluate the effectiveness of CPD. (Smith and Piper 1990) argue that the objective of the exercise should be to aid the learning process rather than control the training. There is suggestion of a variety of methods that may be appropriate, such as surveys, behavioural observation studies, analysis of patient health records etc., but nothing outside of proposals or beyond what may be considered well-known associated research approaches and methods (Jacono and Griscti 2006; Phillips et al 2012). Questionnaires rank as the most commonly used method of evaluation, usually administered at the end of the course (Kirkpatrick 1983). These take the form of 'happy sheets' – that is, post-training questionnaires asking course participants to rate how satisfied they feel with the standard of provision. Although important, responses to these questions do little to assess what the participant has learnt, or how able that participant will be to transfer any new learning to the professional environment (William 2007).

Hardy et al's (2002) 'Expertise in Practice Project' explored the use of portfolios of evidence to enable nurses to articulate understandings of their expertise on the basis that evidence of proficiency emanates from a practitioner's ability to see beyond what is evident and capture in-depth understanding of the impact of clinical situations, clinical decision-making and clinical outcomes. However, Jordan (2000) argues that portfolios of evidence bear the danger of modifying practice in an overly selective manner at the expense of clinical needs unrelated to the training. The author supposes that by combining a detailed account of practice with the reactions of learners, the portfolio method allows issues like practice changes solemnly for the purpose of course assignments to emerge (Jordan 2000).

Testing the knowledge and skills of a learner is said to be an effective evaluation method. Testing is undertaken before, during and at the end of the course with the assumption that knowledge is retained once acquired (Kirkpatrick 1983). Patton (1983) claims that this

method encourages mandatory application of knowledge and skills gained from training because results are measurable through a grading system.

Appraisal is a significant evaluation exercise which is commonly applied in management. Performance appraisal can justify the impact and relevance of a training programme by linking it clearly to performance outcomes and career achievements (Arthur et al 2003). For example line managers can testify during performance reviews whether individuals are able to demonstrate new or enhanced competencies that the learning intervention was anticipated to deliver. Though usually carried out with a superior, appraisal can be undertaken at various personnel levels (360 degree feedback) such as self, superiors, subordinates and peers (Smith and Piper 1990).

Direct observation is an underused yet valuable method for collecting evaluation information (Taylor-Powell and Steele 1996). The method is aimed at evaluating behaviour changes, performance of new tasks and skills pattern (Birnbauer 1987; Patton 1983). Holmboe et al (2004) proved that direct observation of learners' performance with actual patients during medical training is more effective than 'simulations' and 'standardised patients' techniques of measuring competence in clinical skills. The authors established that direct observation can provide effective feedback - eliminating the discrepancy between actual and reported behaviour and also ensure that trainees have attained sufficient skill for independent practice. On the other hand observation is criticised for:

- Its susceptibility to observer bias.
- People performing better because they know they are being observed.
- Being costly and time consuming compared to other methods.
- Failure to improve the evaluator's understanding of why people behave the way they do (CDC 2008).

Addressing specifically the EOF domain VB 2a-f, The Health Foundation (THF) (2013) conducted an evidence scan of evaluations on patient experience and found the most common approaches for undertaking such measurements involved surveys, interviews, and patient stories. Other approaches were online ratings, comment cards, kiosk questions, PALS (Patient Advice and Liaison Service) feedback, ward rounds, focus groups, and complaints and compliments. These are rarely verified as robust methods and their content and suitability to the task is not given in the rarely published accounts (Lee 2010; Ogievie-White 2006; Attree 2006). There is a need for stronger methods and well-targeted questions (Moriarty et al., 2013; Rubin and Parrish 2011; Faller 2010) to support the evaluation of the impact of CPD on practitioners, organisations and service users' experience in health and social care. Published research is heavily dependent on pre-post designs, which are limited because observed outcomes cannot be ascribed exclusively to the education intervention. Appendix 1 outlines the positives and negatives of the different approaches to data gathering. This is reflective of traditional well-rehearsed research methods arguments.

Williams (2007) states that it is not possible to evaluate all levels (*including perception, competency, performance and outcomes*) using one data collection method and that it is crucial to take advantage of innovations in research, theory and practice that can help to ensure that the quality of education and training contributes to more effective practice. Mixed-method evaluations have a great deal to contribute to the development of evidence-based educational interventions for healthcare practitioners. Qualitative and quantitative

methods' strengths and limitations can be balanced by designing evaluations that need both (William 2007). For example, an investigation in the South West of England into the CPD of allied health professionals, prompted by the Department of Health's service enhancement agenda used a mix methods approach. This involved questionnaires to 180 AHPs, four focus groups, and 32 one to one interviews as well as a thematic analysis (Gibbs 2011).

2.5.3.5 Evaluation Metrics

In line with EOF domain VB, Kaliannan and Chandran's (2012) work espouses the empowering benefits of outcome-based education that provides observable and measurable outcomes premised on the idea that all learners can learn. The authors also note that associate values and attitudes must be considered and not dismissed because outcomes worth measuring or observing are fundamental for individual, team and organisational transformation, and for ensuring more positive patient and service user outcomes.

Grant and Stanton (2001) conceive that, education and learning do not take place in a laboratory and it is a great challenge to identify and measure factors relevant to performance and patient care. The authors distinguished such measures to include changes in: i) prescribing practices ii) use of screening techniques iii) preventive care practice iv) diagnostic accuracy and v) referral patterns. However Kanouse and Jacoby (1988) doubt the effectiveness of these measures and argue that proxy data for educational effectiveness, such as prescribing patterns or laboratory test uptakes is only relevant to certain aspects of care, and require extensive access to medical databases.

The hours input approach of measuring CPD impact is simple and easy to monitor but difficult to assess whether or not the hours of CPD translated into improved performance. The output approach attempts to measure the direct benefit of CPD (Friedman and Woodhead 2008). Time is therefore not a useful metric for tracking changes in competence, performance or healthcare outcomes as these outcomes occur over variable periods of time plus learning is episodic and not continuous (Royal College of Physicians and Surgeons 2008). In light of this limitation, the requirements for re-registration by the Health and Care Professionals Council shifted, from an 'input' model to an 'output' model (how does the organisation need me to develop, what do I need to do and what is the impact on practice?) (Skills for Care 2014).

Attributing patient and service user outcomes to CPD is very complex due to the process of care variables, systems of care including health care teams and multiple patient factors (Royal College of Physicians and Surgeons 2008). Hakkennes and Green (2006) distinguished two categories of measures and associated methods of measuring patient outcomes: 1) surrogate measures and 2) actual change measures shown in table 7 below:

Table 7: Measures and Methods of Evaluating Patient Outcomes

Measures of patient/ symptom change	Methods of measurement
Quality of life	<ul style="list-style-type: none"> - Disease specific and global measure - Patient interview/ survey/ questionnaire - Department record/ register/ log book - Medical personnel interview/ survey/ questionnaire - Electronic database
Mortality	<ul style="list-style-type: none"> - Medical record audit - Electronic medical record audit - Department record/ register/ log book - Electronic database
Surrogate measures of patient change	Methods of measurement
Patient satisfaction relating to care received	<ul style="list-style-type: none"> - Questionnaire with ordinal scale
Length of hospital stays	<ul style="list-style-type: none"> - Electronic database - Medical record audit - Patient interview/ survey/ questionnaire
Knowledge and attitudes	<ul style="list-style-type: none"> - Patient interview/ survey/ questionnaire
Number of health care visits and / or hospitalisation	<ul style="list-style-type: none"> - Electronic database - medical record audit - patient interview
Functional status e.g. return to work	<ul style="list-style-type: none"> - Developed scales/ Patient interview /questionnaire
Patient compliance with treatment	<ul style="list-style-type: none"> - Questionnaire/ interview

Although Hakkennes and Green (2006) found medical record audit, computerised databases and health practitioner questionnaire/interview to be the common ways of collecting data on patient outcomes, an earlier study by Mashru and Lant (1997) noted that there is no guarantee that changes in recorded parameters translate into improved clinical outcomes. Jordan (2000) upholds that if developments of professional education and training are to keep sight of patients who are the ultimate beneficiaries of CPD, clinically and methodologically valid designs to explore the links (if any) between education/ training inputs and clinical outcomes should be developed.

Berwick (2013) suggests that patient safety can be maintained and improved by interrogating information generated from perspectives of patients and their families; measures of harm; measures of the reliability of critical safety processes; information on practices that encourage the monitoring of safety on a day to day basis, on the capacity to anticipate safety problems and on the capacity to respond and learn from safety information. Berwick also highlighted that staff attitudes, awareness and feedback are important resources to gain insights into staff concerns.

It is crucial that CPD is robustly evidenced as effective if it is to continue to be funded. Although funding cuts have already been implemented and reduced funding for training linked to continuing risks (Nuffield Trust 2014), the urgency is for a convincing evidence base to demonstrate the impact of CPD (Draper and Clark 2007). A multidimensional less positivist approach is favourable as it is more inclusive and distinctive. Draper and Clark's (2007) paper raises questions rather than explicit answers, but hints at possible ways

forward for methodological approaches, providing interesting questions around appropriate methods and scales. Smith and Piper (1990) maintain there is no wrong or right method but there is a method and/ or a combination of methods more suited to the needs of all stakeholders. The authors recommend a pilot evaluation to explore the potential outcomes and determine suitability of the style of evaluation taking care to avoid prejudicing the main evaluation study.

2.5.3.6 Challenges of Evaluating CPD

The majority of employers undertake some sort of evaluation of learning interventions in their organisations however it can be very difficult in practice to measure the impact of learning, particularly directly in respect of business success (CIPD). Many practitioners and managers seem to have doubts about their own capacity or the capacity of their agency to deliver a measurably high quality service. Measurement brings with it the risk that this incapacity will be exposed (Skinner and Whyte 2007). This creates a gap in the evidence available on the effectiveness of CPD, which raises questions about the level of faith being put in training and education.

Where studies are carried out, CPD impact evaluations rely on post education and training questionnaires that provide basic information about delivery rather than evidence of impact on individual practice, the organisation as whole and service user outcomes (Carpenter 2011). Most studies that have tried to provide the evidence are small scale and the tools used are self-developed, not validated and unproven, with a lack of robust indicators and measures that are aligned to educational outcomes (Attree 2006; Clark 2005). For example, the majority of the 53 studies screened for inclusion in the review by Freeth et al (2002) were characterised by poor methodology, and many did not indicate the educational philosophy that underpinned the design of the learning opportunity.

There are very few comparative studies and none involving controls and this is identified as an area for development (Carpenter 2011). Ellis et al (2000) attempted a randomised control trial but encountered major challenges with the randomisation aspect of the study. In their critical examination of the evaluation of CPD, Smith and Piper (1990) found that it is practice to focus on the learning process and participants' responses and reactions, instead of longer term outcomes. The authors also critiqued the scientific methodology of determining learning outcomes through using statistics and controls for failing to recognise the unintended outcomes of learning. Smith and Piper associated the qualitative inquiry with understanding of processes and falling short of illuminating outcomes related to budgets and time.

Numerous studies (Roberts et al 2014; The Health Foundation 2013; Scannapieco et al., 2012; Carpenter 2011; McSherry and Warr 2008; Jacono and Griscti 2006; Ogivie-White 2006) have highlighted the lack of published body of work evaluating the impact of CPD especially on service user/patients' experience and health outcomes. Jacono and Griscti point out that when CPD impact evaluation happens, it is usually done from a practitioner perspective, but Hakkennes and Green (2006) argue that evaluation of CPD that targets clinical behaviour, for which there is strong evidence of benefit, should focus on measuring outcomes in terms of whether a change in clinical behaviour occurred, making the practitioner behaviour an indicator of the outcome measure. However, the authors also

contradict this approach by suggesting that, failing to undertake measures at the patient level prevents tackling the question of whether the implementation of changed practitioner behaviour results in improved patient outcomes. The Health Foundation (2013) recommends that patient experience needs to be assessed over time otherwise it is merely a reflection of a fixed point that does not track significant changes.

Evaluations are commonly non-consultative due to limited time and resources. Smith and Piper (1990) believe that openness and discussion about the aim of the evaluation may lead to the process being taken more seriously by involved stakeholders and the results contributing to further action. The authors also acknowledge that there is no easy solution to subjective evaluation but its existence should not be ignored.

The NHS staff evaluation and development is based on the KSF but the differences in specialities make the assessment of skills development more difficult. For example, emergency medicine practitioners at different levels are required to demonstrate skills in trauma life support before they qualify for a specific level of intervention (Schostak et al 2009). On the contrary, much of the skills used in clinical practice, such as understanding patients' pattern of thoughts and physical circumstances, are invisible and more difficult to assess. To address this constraint the Royal College of General Practitioners offers opportunities for GPs to demonstrate that their CPD learning has been implemented in practice by providing evidence like case scenarios, event analysis or audit (Mathers et al 2012). Articulating and displaying proficiency can be a test, and yet conformist approaches (e.g. *case scenarios*) to understanding proficiency and hierarchy in healthcare practice are challenged (Hardy et al 2002). In such domains it is more difficult to differentiate procedural knowledge from adaptive skills (Kraiger et al 1993). Learners may reproduce trained behaviour but only through a heavy reliance on working memory and mental rehearsal of previously learned routine (Weiss 1990).

Mathers et al (2012) argue even where learning occurs, the opportunity to implement it at will, may be limited. Some CPD is about rare clinical conditions or scenarios which healthcare practitioners may only encounter once every few years. For example in 2013 HEE launched mandatory dementia awareness training for all NHS and social care staff. Following training, a GP may also wait some time before they see a relevant patient (Mathers et al 2012). This makes measuring the impact of CPD on dementia awareness difficult to implement.

Augmenting Manley and Garbett's (1999) call for a varied approach to understanding proficiency, Schostak et al (2009) postulate that measuring the non-visible domains of clinical practice requires conceptualisation, a philosophy and approach different to the method of assessing visible and practical clinical skills.

2.5.3.7. How Would We Recognise That CPD is Effective?

Evaluation approaches, methodologies and methods have been identified for answering evaluation questions aligned with different purposes of CPD across a range of outcomes. The focus of this literature review is on the impact that CPD makes around these key purposes and levels. This section therefore identifies what indicators exist or need to be

developed that demonstrate that CPD is effective and delivers on the purposes identified as well as acknowledging impact at different levels.

Indicators are defined as measurement tools used to monitor and evaluate the quality of important governance, management, clinical and support functions (JCAHO 1990). While Calzone et al's (2011) work is limited in its focus on improving understanding and knowledge about genetics and improved performance and competency through CPD, it is useful for its emphasis on the need for outcome indicators in the assessment and evidencing the impact of CPD.

Effective CPD at Individual Level

The purpose of CPD is to develop the abilities of the individual and, through this development, change and improve practice and service provision (O'Sullivan 2004). CPD plays the crucial part for continued fitness to practice and patient safety as well as maintaining professional standards and is effective only to the extent that the skills and behaviours learned and practiced during instruction are actually transferred to the workplace (Marvin et al 2010).

For the individual practitioner, CPD links continuous learning and professional development and is often associated with career progression and improved patient care. CPD is directly connected with appraisal and revalidation and generally conceptualised in terms of performance (Schostak 2009). The Association of School and College Leaders (ASCL) policy paper (2008) details that effective CPD recognises different career stages and a cycle of coherent development which each individual will repeat many times including:

- Induction to the post.
- Consolidation of skills and expertise.
- Maintenance of up-to-date employment-related knowledge.
- Refreshment (developing new ideas and skills).
- Extension and career progression (taking on additional responsibilities/attaining further qualifications/moving into the upper pay spine/developing as leaders, higher level teaching assistants etc.).
- Changing roles.

In their investigation of the effectiveness of CPD in nursing, Jacono and Griscti (2006) suggest that evidence of participatory learning approaches and learners who are self-directed and position themselves as lifelong learners are indicators of effective learning. In consensus, Manley et al (2009) pinpoint a number of indicators of effective CPD at the individual level including: engaged self-directed independent learners; reflexive learners; knowledgeable, skilled, critical and values based thinkers; organised learners with the ability to apply theory to practice; providers of person centred, evidence based care; and research and academically minded practitioners. Additionally, Landor (2011) highlights building confidence as an indicator of effectual CPD.

Effective CPD at Team Level

Teams are a form of organisational design useful for improving performance in health care and successful team working can be evidenced through empowerment, communication, flexibility and organisational performance (Goni 1999). Best et al (2005) established that

there is a dearth of evidence to support the impact of CPD on team performance. Nevertheless literature (Davis et al 1998; Davis et 1995) shows that interactive CPD sessions are far more effective in providing the opportunity to practice skills that can effect change in professional practice and, on occasion, health care outcomes.

Effective CPD at the team level entails implementation of learning from an educational programme in the workplace, prompted by modifications in attitudes or perceptions, or the application of newly acquired knowledge and skills (Carpenter 2005). Constructed upon work-based learning in the context of contemporary healthcare education and practice, Manley et al (2009) identified indicators of successful CPD for teams in the workplace to encompass: collaborative working; communication based on mutual respect; increased learner confidence; shared innovative team responsibilities for service/practice development; and improved team working. The study carried out by Hughes (2005) distinguished the presence of reflective practitioners and leadership programmes to demonstrate effective CPD.

Effective CPD at Organisational Level

Individuals and teams form part of the organisation but the whole amounts to something greater than the sum of its parts. Although individual learning is important to organisations, organisational learning is not simply the sum of each member's learning (Fiol and Lyles 1985). Effective CPD at the organisational level focuses on improving service provision and evaluates its impact on learning. Robust organisations can still accumulate competence and capacity despite the turnover of staff (Davies and Nutley 2000).

Argyris and Schön (1978) described three levels of organisational learning:

- i) Single loop which mainly involves correction of error and tends to leave organisational objectives and processes unchanged.
- ii) Double loop which may lead to redefining organisational norms, policies, procedures or structures. This level of learning attempts the development of new and innovative models of service and redesign of service.
- iii) The ability of the organisation to learn about the contexts of their learning; successful learning organisations build on their experience of learning to develop and test new learning strategies.

Studies by Anderson (2007) and Goodall et al 2005 indicate that effective CPD in an organisation is evidenced when:

- The organisation continually seeks to challenge and improve its processes.
- Learning is contributing to the achievement of defined performance targets. Organisational performance involves effectiveness i.e. employee contribution and human resource indicators; and profitability i.e. return on investment.

Howarth (2006) developed a benchmarking tool that enables organisations to assess and gather evidence on ability in terms of training and education across six domains (team working, communication, role awareness, personal and professional development, practice development and leadership and partnership working). The tool suggests potential evidence of effectiveness for each domain; and within personal and professional development specifies the following organisational indicators of effective best practice:

- Supportive environments
- Flexible learning opportunities
- Training and supervision to support - personal and professional development.
- Personal and professional development programmes
- Service users being included in personal and professional development programmes
- Integrated working

In a similar vein, Manley et al's (2009) work proposes signifiers of effective learning at the organisational level to include:

- Better use of evidence based practice
- Effective roles and mechanisms for driving change and improvement.
- Integral work place learning strategies
- Evidence of realised change
- Service user involvement in decision making
- Better care, case management, and personal and professional development.
- Commitment to, and engagement in, life-long learning

Some authors have come up with indicators that are indirectly related to organisational performance. For example Clardy (2005) established a direct link between organisations' training practices and reputation. The nature of an organisation's reputation influences how competitors, service users and even employees interact with the organisation which can have important financial consequences. Brown and Van Buren (2007) argue that useful CPD enhances organisational social capital by enabling relationship building, norm development, and institutional trust.

Rhydderch et al (2004) argue that the process for change in the UK is primarily "top down" and that greater encouragement should be given to encouraging ownership of change at the "lower" individual, team and organisational levels. Until learning is transferred into the workplace in form of increased performance the organisation does not realise the benefits of their investment in training the practitioners (Marvin et al 2010).

Effective CPD at Society Level

The current healthcare climate is needs-led and educational outcomes focused and therefore it is presently difficult to articulate the value of CDP in relation to patient experience and outcomes (Draper and Clark 2007). The Health Foundation (THF) (2013) recognises that there is a lack of evidence to demonstrative the link between patient experience and service improvements and/or practitioner behaviour change.

Nonetheless, Carpenter (2011) suggests that outcomes for service users and carers can generally be considered in terms of changes in such factors as the quality of life, skills and behaviour, self-esteem and levels of stress (Carpenter 2011). The principles of nursing detail what society (including colleagues, patients, or the families or carers of patients) should expect from healthcare. Subsequently it is safe to state that based on the RCN's Principles of Nursing Practice and their measures (2010) the following indicators demonstrate the effectiveness of CPD at the society level:

- Caring with dignity, respect, compassion and sensitivity.

- Practitioners that take responsibility for the care they provide, and provide it in a person centred way.
- Vigilance and risks management.
- Person-centred health promotion.
- Practitioners at the heart of communication process.
- Skilled practitioners working with current knowledge and evidence informing care.
- Collaborative working, with patients placed at the centred.
- Personally and professionally developed practitioners that are mutually supportive.

Aguinis and Kraiger (2009) maintain that effectual training efforts improve the quality of the workforce, which in turn is related to greater economic prosperity.

Appendix 2 demonstrates some of the indicators of CPD effectiveness at different levels across social care. Whilst some work has been done on developing tools to measure CPD effectiveness, and equally some work has been carried out on identifying indicators of that effectiveness - work that is important in building an understanding of the multifaceted constituents involved in assuring the effectiveness of CPD – more broadly, there is agreement that much more work is required, and that the development of meaningful and comprehensive tools is essential if there is to be a significant shift forward and away from just rhetorical calls for palpable tools towards progressive creation and implementation.

Summary and Key Findings from the Literature Review

There are a number of drivers for CPD that constitute a blend of professional regulatory requirements and governance, economic and political factors, developments in educational understandings and approaches, work place environments and cultures, public and service user needs and individual practitioner motivations. This combination of drivers exist across health and social care settings, although the degree to which they have an impact may vary according to circumstance and context.

3. Study Methodology and Methods

This section of the report sets out the rationale for the methodological approach chosen on which to base the study design and selection of methods.

3.1. Methodology

Realist Synthesis and Evaluation (Pawson and Tilley 2008) was chosen for this study because it focuses on understanding and unpacking the mechanisms by which an intervention (CPD) works (or fails to work), thereby providing an explanation, as opposed to a judgment about how it works (Pawson et al 2005). The realist approach is fundamentally concerned with theory development and refinement (Rycroft-Malone et al 2010; Pawson 2006; Pawson et al 2005). It accounts for context as well as outcomes in the process of systematically and transparently synthesizing relevant literature (Rycroft-Malone et al 2010; Pawson 2006). It focuses on providing explanations for why interventions may or may not

work, in what contexts, how and in what circumstances and for whom (Greenhalgh et al 2011)

The realist approach is philosophically rooted in realism, which combines three social science principles: causal explanations are achievable; social reality is mainly an interpretative reality of social actors; and social actors evaluate their social reality (Delanty 1997). Realism involves identifying underlying causal mechanisms and exploring how they work under what conditions (McEvoy and Richards 2003; Wilson and McCormack 2006). This contextually bound approach to causality is represented as context + mechanism = outcome (Pawson & Tilley 1997). Therefore, it is an appealing approach when trying to expose and unpack the complexities of CPD contexts and interrelated mechanisms underlying implementation activity to inform identification of impact indicators.

In the first phase a realist synthesis follows similar stages to a traditional systematic review, but with some notable differences:

1. The focus of the synthesis is derived from a negotiation between stakeholders and reviewers and therefore the extent of stakeholder involvement throughout the process is high.
2. The search and appraisal of evidence is purposive and theoretically driven with the aim of refining theory.
3. Multiple types of information and evidence can be included.
4. The process is iterative.
5. The findings from the synthesis focus on explaining to the reader why (or not) the intervention works and in what ways, to enable informed choices about further use and/or research (Pawson 2005).

Realist Synthesis and Evaluation is a staged process, and Figure 1 identifies the stages of the project in Phase 1 and Phase 2 leading to the development and testing of the CPD Impact Tool with stakeholders.

Realist evaluation begins with the gathering of data in relation to programme theory and is organised according to what was done within the programme. A range of different methods for collecting the data can be used, including critical discussion with experts and stakeholder consultation workshops. Methods for analysing the organised data are applied relative to whether the data is qualitative or quantitative. The outcomes from the analysis are then separated out into sub groups that are relative to the programme theory. From here it is possible to identify mechanisms that engender the outcomes and the contexts in which the mechanisms did or did not work. The result is a set of context-mechanism-outcome (CMO) statements that illustrate what outcome is engendered, by which mechanism and in what context. Therefore, hypothesis/theories link context, mechanisms and outcomes (Table 8). The generation of CMO statements does not need to be done in any particular sequence, so it is possible to look for associated contexts, mechanisms, and outcomes in any order. The subsequent stage of analysis is about judging which of the CMO statements provide the soundest elucidation, and then comparing that elucidation to the original programme theory and adapting the programme theory accordingly (Pawson & Tilley 2004).

Table 8: The Realist Hypothesis Grid

Context	Mechanisms	Outcomes
C1	M1	O1
C2	M2	O2
C3	M3	O3

The report now moves into a description of the team's approach to applying the realist synthesis method to a review of CPD describing the methods used in detail and the strengths and challenges encountered in its use.

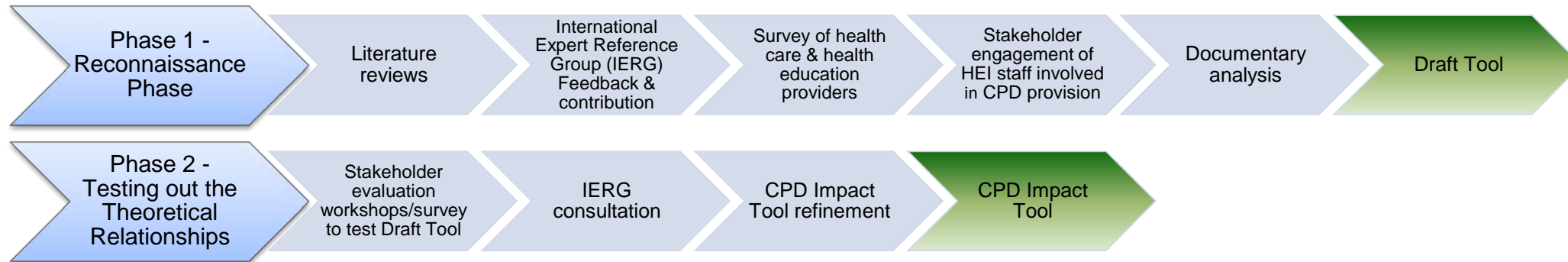


Figure 1: Methods process overview diagram

3.1.1. Ethical Approval for the Study

Ethical approval was provided by Canterbury Christ Church University Research Ethics and Governance Committee on 23rd December 2013 (Appendix 7). As no vulnerable groups were to be participating in the project no further ethical review was required under the terms of the University procedures.

3.2. Research Methods

3.2.1. Phase 1: Reconnaissance Phase

Phase 1 of the project involved a reconnaissance and synthesis of evidence from multiple data sources across different stakeholder groups. This approach helps to elicit the strengths and weaknesses of what is being evaluated i.e. what works for whom in what context, by identifying patterns that illustrate the links and relationships between contexts (where), mechanisms (how), and outcomes (what). Phase one took place from December 2013-July 2014 and included:

1. Literature review of health, social care, human resources and organisational development, and educational theories and philosophies and health and social care policy (Section 2).
2. Feedback and the contribution of expertise from an international Expert Reference Group (Section 4).
3. Survey of healthcare commissioners, educational institutions, healthcare providers, learners and practitioners⁴, professional bodies, service user advocates (comprising national voluntary sector organisations), and Academic Health Science Networks (AHSN) and NHS Clinical Leaders Networks (CLN).
4. Stakeholder engagement with university staff involved with providing CPD.
5. Documentary analysis of work based and university based CPD programme outputs including work-based portfolios, assignments and reflective reviews.

The findings and summary of the literature review are presented in Section 2 of the report.

International Expert Reference Group

The Expert Reference Group that was recruited comprised ten international experts in healthcare and education. Huddle (Huddle, 2015), a secure workspace for sharing and working in a cloud, was set up to enable and facilitate critique and dialogue. The International Expert Reference Group was engaged with the project from March-December 2014 and was tasked to provide critical review and advice on the development of the CPD Impact Tool project. They were responsible for:

- Providing critical feedback on the literature reviews.

⁴ Practitioners are health care practitioners across primary and secondary care at bands 1-8 of the NHS Career Framework

- Providing critical review and feedback to our centre (ECPD) in developing and monitoring project tools and frameworks.
- Acting as a forum for validating phases of data collection and analysis.
- Providing a forum for critical discussion of progress.
- Reviewing project outcomes and outputs.

Survey

A Bristol on Line survey was launched to engage seven stakeholder groups both nationally and regionally. These included healthcare commissioners, educational institutions, healthcare providers, learners, professional bodies, service user advocates (comprising national voluntary sector organisations), Academic Health Science Networks (AHSN) and NHS Clinical Leaders Networks (CLN). Table 9 illustrates the responses to the survey and the data each group were invited to provide. Despite engaging the support of the Council of Deans for Health, the RCN and FoNS, the Patient's Association, Health Watch, NHSE and LETBs to promote the survey, as well as using Facebook, Twitter and our University media, the response rate was disappointingly low. We sent out three reminders and extended the deadline for feedback three times.

Table 9: Bristol Online Survey Data Return

Stakeholder	Number of completed survey returns	Data generation
Academic Health Science Networks (AHSN)/NHS Clinical Leaders Networks (CLN) (national)	1	Existing organisational frameworks, tools, and indicators that assess the impact and effectiveness of CPD learning.
Commissioners (national)	18	Existing frameworks, tools, and indicators that assess the impact and effectiveness of CPD learning.
Educational institutions (regional)	7	Existing institutional frameworks, tools, and indicators that assess the impact and effectiveness of CPD learning.
Health care providers (regional)	39	Existing frameworks, tools, and indicators that assess the impact and effectiveness of CPD learning.
Learners (regional)	20	How their learning is impacting on their practice and the care they provide.
Professional bodies (national)	8	Existing frameworks, tools, and indicators that assess the impact and effectiveness of CPD learning.

Stakeholder	Number of completed survey returns	Data generation
Service user advocates (national)	8	Whether CPD learning makes a difference to improving service user care and experiences.

Analysis of the survey data was undertaken in April 2014 using a qualitative content analysis method comprising four steps. All data returned by stakeholders through the online survey was used. Responses to the questions were collated according to each stakeholder group providing 6 data sets for analysis. The four analysis steps included:

1. Step 1. Overview.
2. Step 2. Sharing initial impressions.
3. Step 3. Content analysis.
4. Step 4. Theming.

Based on the content analysis, a summative theming then took place. Each project team member 'adopted' the perspective of a group of stakeholders (as found in the content analysis) to draft an outline of the impact measures or requirements based on three questions.

Questions asked:

- What do you want CPD to be?
- What should CPD do?
- How should it be evidenced?

'Adopted' perspectives:

- CPD learner
- Provider representative (senior manager)
- Workplace colleague and manager
- Commissioners

There was not enough AHSN/CLN and professional body data to do any theming. When turning to consider the service user data it was found to have already been captured through the 'adopted' perspectives.

Stakeholder Engagement with University Staff

An engagement workshop was held with internal stakeholders, from across the Faculty of Health and Wellbeing at Canterbury Christ Church University, who are involved in providing and facilitating CPD. The stakeholders were provided with a project overview and purpose and were invited to comment on the project processes and phases and the emerging Draft Tool. Beyond the workshop the group were invited to contribute to the documentary analysis.

Documentary Analysis

The documentary analysis took place in July 2014 and involved a 9 step process described in Figure 8 that reviewed 14 sets of data and 59 assignments. The purpose of the analysis was to identify potential indicators of individual, team, service or organisational effectiveness from workplace portfolios and assignments that may provide insights into the impact of continuous professional development (CPD). The process involved reading the documents (datasets) provided and analysing these independently using a purposively designed analysis template, then discussing and agreeing as a group the potential criteria that could be measured (e.g. confidence) or indicator (actual measure).

Figure 8: Documentary Analysis

- Inspiring Consultant Practitioner Programme x 1 set of post evaluations
- Post-cognitive Mapping from Clinical Leadership Programme x 1 set of post evaluations
- Clinical Leadership Programme x 1 portfolio
- Self-assessment tool from Shared Purpose Framework x 1
- Psychodynamics of Organisations x 7 assignments
- Strategic Leadership level 7 x 5 assignments
- Building Community Capacity Within the Workplace x 4 portfolios
- Influencing Effective Workplace Culture level 7 x 3 assignments
- Negotiated Learning Module level 6 x 15 reflections
- Enhancing Person Centred Care level 5 x 5 digital stories
- Changing Work Place Practice foundation degree level (bands 2-4) x 3 assignments
- Leadership and Management level 6 (team leaders) x 6 assignments
- Facilitating Individual Effectiveness Level 6 x 6 assignments

The steps involved in the process are outline in Figure 9 below:

Figure 9: Steps Involved in Documentary Analysis

Step 1. Setting up:
The data sets were numbered and set down on separate tables alongside a copy of the Analysis Framework (Appendix 3.). Data sets that consisted of more than one document had letters (i.e. a, b, c) assigned to each of their items to ensure a clear audit trail of evidence.

Step 2. Confirming the process:
The Framework document was introduced to analysers, who confirmed they understood and were comfortable with the process.

Step 3. The data analysis:
Each analyser took a data set they were unfamiliar with and undertook the analysis task.

Step 4. Confirming conversation:
Midway through the session there was a break and the team talked about their initial perceptions.

Step 5. Review of session and next steps:
The team agreed that as there had not been enough time as a group to discuss and agree potential criteria that could be measured, we needed a larger cohort of data sets to include a broader spread of learning levels and that the following be taken forward:

- Additional data sets sought.
- Three further days of analysis be undertaken.

Step 6. Further additional data sets:
Further data sets were subsequently analysed using the Education Outcome Framework Analysis Framework (Appendix 3).

Step 7. Further analysis:
A content analysis of the data sets was conducted, followed by a word search, using the 'find' option in Microsoft Word, for potentially frequently occurring indicators. Identified potential frequently occurring indicators were then member checked by the research team present and consensus was drawn on their applicability. An example of this process is shown below:

Stage Indicators name	Stage 2 Total frequency	Stage 3 Frequency as individual indicator	Stage 4 Frequency as team indicator	Stage 5 Frequency as service indicator	Stage 6 Frequency as organisational indicator	Stage 7 Frequency in notes
Confidence	22	21				1
Shared vision	5	1	2		2	

Step 8. Cross referencing indicators:
An additional data set (Facilitating Individual Effectiveness level 6 x 6 assignments) was then sought to enable cross referencing of the identified indicators to be carried out.

Step 9. Ranking and prioritising indicators:
The final part of the analysis was to rank order the indicators according to the frequency by which they appeared across all the data sets.

Output from Phase 1- Draft CPD Impact Tool for Testing

The datasets were synthesized to develop a theoretical framework for understanding the context in relation to the provision of CPD, its drivers, outputs and impact. Different philosophical positions about CPD were acknowledged through four types of transformation with potential indicators identified across these areas: the individual's professional practice; skills to meet the changing needs of health care; knowledge translation and workplace context. Also indicators were aligned to the individual, team, service and organisational levels.

The synthesised framework was informed by different philosophical approaches to education and learning explored in the literature review, the literature about CPD across a number of different disciplines, International Expert Reference Group consultation, a survey with 7 stakeholder groups, evaluation groups with education providers and facilitators and output analysis of learners' products of learning (documentary analysis).

Consistent with a realistic evaluation approach, four general theories of transformation have been distilled to describe and explain tentative relationships between the contexts and mechanisms of CPD to achieve specific outcomes, linking these in turn to impact and potential indicators. This theoretical framework seeks to identify what works for whom in what circumstances, with a specific focus on the indicators of effectiveness and outcomes of CPD.

The four transformational theories describing and explaining CPD and linking these to a specific set of outcomes are:

- Transformation of individual's professional practice.
- Transformation of skills to meet society's changing healthcare needs.
- Transformation of knowledge enabling knowledge translation.
- Transformation of work place culture to implement workplace and organisational values and purpose relating to person centred, safe and effective care.

The four theories of transformation enabled four specific action hypotheses to be generated and the related mechanisms, context and outcome relationships (MCO relationships) to be proposed.⁵ These relationships were to be tested and refined through Phase 2 of the project.

3.2.2. Phase 2: Testing Out the Theoretical Relationships

The second phase was undertaken from August 2014-December 2014. The MCO relationships proposed identify what works for whom and in what context based on stakeholder reasoning from phase 1, combined with insights from the literature across different disciplines.

In this second phase the focus became more specific so that the hypotheses/theories could be tested across the MCO relationships more deeply by paying detailed attention to reasoning.

⁵ Note we have reversed the order of these to reflect our findings.

The stakeholders drawn on for Phase 2 were therefore groups who could challenge and critique the reasoning and relationships between the mechanisms, contexts and outcomes, as well as critique potential indicators - providers of CPD namely HEIs, NHS Trusts, and users of CPD.

Two main methods were used in Phase 2:

- Stakeholder Evaluation workshops
- International Expert Reference Group

1. Stakeholder Evaluation Workshops/Survey to Test the Draft Tool

The following were invited to participate in consultation workshops held in October and November 2014:

- CPD Providers:**
- CPD providers that focus on skills development/training/procurement of CPD
 - HEI providers that focus on knowledge, skills and use of these
 - HEI providers that focus on work based learning
 - WBL facilitators/mentors in provider organisations
- CPD Users:**
- Students on programmes focusing on WBL/team /organisational development
 - HEI Students on the CPD programmes focused on skills development
 - HEI Students on programmes focusing on WBL/team /organisational development
 - Participants in work based programmes that were being or had been completed

Seven workshops were run with HEIs across Kent, Surrey and Sussex, and a service user survey consultation was run by accessing emailing distribution lists via a local and a national service user forum.

The workshops were made up of the following participants:

Workshop 1	CDP facilitators/providers	3 participants
Workshop 2	CPD learners	11 participants
Workshop 3	CPD facilitators/providers	6 participants
Workshop 4	CPD facilitators	4 participants
Workshop 5	CPD facilitators/providers	4 participants
Workshop 6	CPD facilitators/providers	3 participants
Workshop 7	CPD facilitators/providers	8 participants
Survey	National service user forum	1 participant

The workshops ran for up to 3 hours depending on context, beginning with an introduction to the project through use of a PowerPoint presentation. Each participant group was then given a written information sheet that explained the workshop aims and objectives and what the participants were required to do. Upon giving informed consent the workshops participants were then asked to;

- Consider the 4 transformation theories about CPD in relation to their own experiences as a learner, facilitator or provider of CPD. A feedback form/summary sheet enabled participants to capture their thinking in small groups to identify consensus and gaps in the theories, MCOs and impact indicators.
- Identify the indicators they currently use, indicate which they felt easiest and hardest to measure, and identify which indicators they felt were most worthwhile.

Time was given for any other comments or contributions that participants wanted to make/felt were important.

The service user survey participants were invited to contribute in the same way, although by virtue of the consultation being conducted through email or by phone the response was very low, reflective of the difficulties in accessing research participants via gatekeepers.

2. International Expert Reference Group Consultation

The Group were invited to comment on three key areas:

- The revised and updated literature review.
- The Draft CPD Impact tool which integrated the 4 theories of transformation and associated hypotheses.
- To identify anything that was missing.

The critical questions informing their review were:

- What is missing in the literature review or/and the CPD Impact Tool?
- Has the right emphasis been placed in our literature review?
- Are the relationships between the 4 transformation theories, MCOs and impact indicators clear?
- Do you have any other feedback or comments you would like to make?

Feedback from consultation was synthesised and used in refining of both the literature review and the CPD impact tool.

Refining the CPD Impact Tool

Quantitative data from the workshops was used to refine the outcomes and indicators. Indicators were ordered according to the frequency of their use. Indicators felt the easiest and hardest to measure and those felt most worthwhile were collated. Qualitative data from the workshops was considered and accordingly used to develop the transformation theories.

Outputs from Phase 2

These can be summarised as:

- CPD Impact Tool Transformation Table with MCO relationships and indicators of outcome.
- Synthesised model for CPD integrating its purpose and transformational approaches, focus and interrelationships for person centred safe and effective healthcare.

4. Findings

The findings presented are a synthesis resulting from the two phases of data collection and analysis and are structured around the following sections:

- **The overarching framework for understanding effective CPD** - This section describes the key components of CPD, its context, four transformational processes and purposes of CPD.
- **Four transformation theories** – This section describes the focus, inter-, and intra-relationships that describe and explain effective CPD in health and social care contexts linked to mechanisms and outcomes.
- **Impact indicators useful for determining the impact of CPD** - This section describes:
 - The findings in terms of those indicators identified as being used most frequently by both Facilitators and users of CPD, those considered easiest and hardest to measure and those considered most worthwhile.
 - A range of ways identified to **evaluate achievement of CPD impact**.

4.1. The Overarching Framework for Understanding Effective CPD

The emergent framework presented in Figure 10 is a synthesis that describes and explains (i) the contemporary context of/for CPD, and (ii) the relationships between the main purpose of CPD, approaches and focus of CPD at the macro level for health and social care. A tentative framework was developed as a working systems model in Phase 1 of the study, derived from analysis of datasets arising from a wide range of different stakeholders, but also drawing on the literature. Following Phase 2, the framework was reconfigured to that presented in Figure 10. This systems approach led to the identification of relationships between:

1. **Inputs** to CPD e.g. stakeholders expectations and requirements, contextual factors around CPD provision.
2. Tentative **processes of transformation** in CPD, informed by the literature and different philosophical understanding underpinning education, learning and its purpose.
3. **Outputs, outcomes, and individual, team and organisational impact** of CPD.

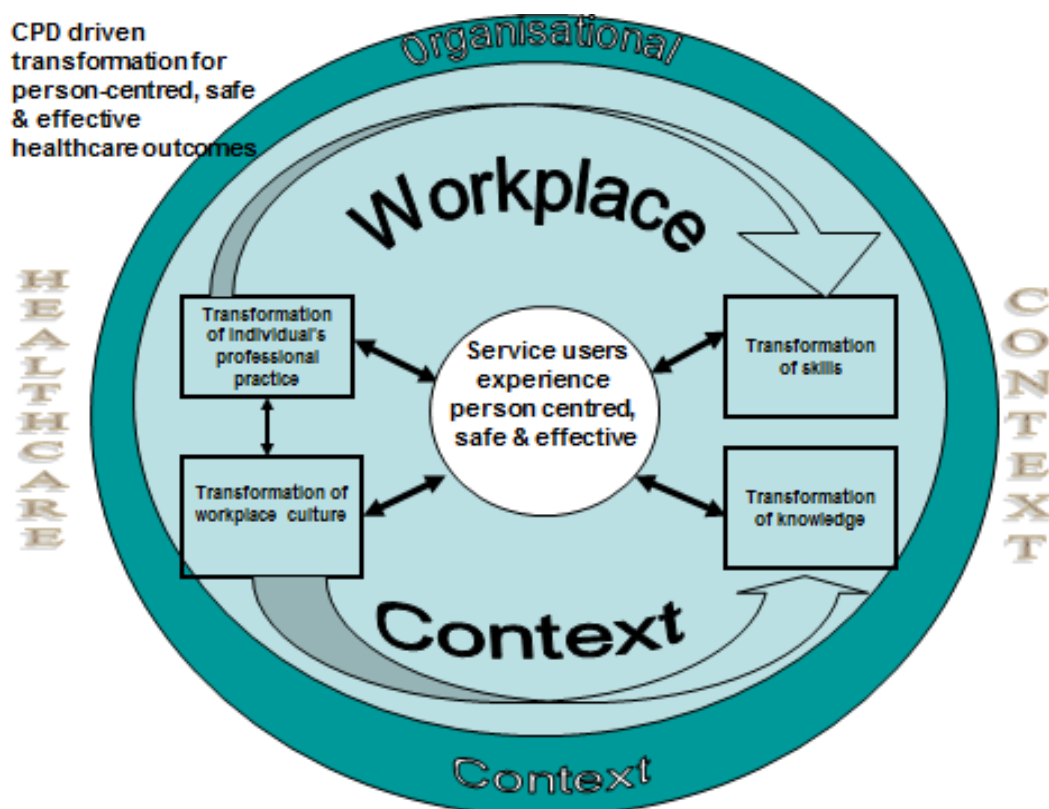
Feedback from the International Expert Reference Group challenged the project team to reflect on the central purposes of CPD for different service users. Based on triangulating all datasets, the primary purpose at the centre of Figure 10 is meeting the health and social care needs of people in the workplace (or the person's home), so that experiences are person centred and care received is both safe and effective. Figure 10 illustrates how the workplace can be the focus of CPD and also an influence on it – positively or negatively. The organisational, health and social contexts are similarly influential as inputs to and potential beneficiaries of CPD. All components of Figure 10 are interrelated and interdependent - a characteristic of whole systems thinking.

Within the primary purpose at the heart of Figure 10 are four other related purposes of CPD that focus on the individual's as well as the team's journey of transformation in their work and their workplace, specifically the transformation of:

- The individual's professional practice.
- Skills to meet a continually changing context.
- Knowledge, so that it is used and blended with other knowledges⁶ in practice through knowledge translation approaches.
- The workplace culture/context.

Clarity about the purpose of CPD, its underlying assumptions and how it is achieved is essential if appropriate indicators of CPD are to be identified.

Figure 10: Overarching Framework Identifying Key Purpose, Context and Components of Contemporary CPD



Through testing out the relevance and the relationships between transformational theories with CPD users and providers in phase 2, the study identifies that although all four theories are important and interdependent, some could be considered precursors if the primary purpose is to be achieved optimally and consistently. Figure 10 shows this relationship through the direction of the arrows; two sub purposes, the **transformation of workplace culture/context** and **individual professional practice** are important pre

⁶ Knowledges encompasses theoretical and practical knowledge, knowledge of the person being cared for/worked with, experience, expertise, artistry, creativity and local knowledge.

requisites to the other two sub purposes if the transformation of skills and transformation of knowledge are to achieve their full impact in the workplace for service users. So, if CPD is only directed at the individual's professional practice, rather than all secondary purposes, then impact may only be limited and the use of public resources not value for money (See Story 1).

Story 1

A large NHS Trust sends a group of practitioners on a commissioned training programme run by a local University in order to upskill them to improve the quality of care provided in outpatient departments as part of an organisation wide strategy to create an integrated outreach programme to reduce patient waiting times. The practitioners learn amongst other skills to cannulate and to take bloods, the aim being that outpatient clinics might be led by nurses and AHPs in both hospital and GP and walk-in centre settings. On returning to their workplace, only 30% of participants are enabled to put these newly learned skills into practice. These participants experience good support and ongoing supervision and coaching from members of the multidisciplinary team and opportunities to update their skills as and when required. The workplaces are able to demonstrate the positive impact the innovation is having on staff and team morale and professional development, patient satisfaction with services and patient flow. The other 70% return to workplaces where there is opposition from other members of the multidisciplinary team, lack of support and supervision or lack of opportunity to put their skills into practice. As the workplace is not enabling a learning environment to advance practice no one benefits and the investment is wasted.

Table 10: Transformational Theories and MCO Relationships Identified at the End of Phase 1

Theory	Hypothesis	Mechanism	Context	Outcomes
Transformation of individual practice	CPD that is work based, driven by the learner, provides facilitated support and reflection and includes 360 degree feedback will increase self-confidence, self-awareness, role clarity, a positive attitude to change and opportunities for career development.	M1 Facilitated support and reflection	Transformation of individual practice	CPD that is work based, driven by the learner, provides facilitated support and reflection and includes 360 degree feedback will increase self-confidence, self-awareness, role clarity, a positive attitude to change and opportunities for career development.
Transformation of skills to meet society's needs	CPD that focuses on self-assessment expanding skills to meet a changing service will be reflected in outcomes around better integration and continuity of service provision,	M5 self-assessment	Transformation of skills to meet society's needs	CPD that focuses on self-assessment expanding skills to meet a changing service will be reflected in outcomes around better integration and continuity of service provision,

Theory	Hypothesis	Mechanism	Context	Outcomes
	greater employability and opportunities for career progression.			greater employability and opportunities for career progression.
Transformation of knowledge/knowledge mobilisation	CPD that focuses on providing up to date knowledge about effective, safe practice will achieve knowledge transition if participants are supported to develop their skills in facilitation of others' learning and the blending of different knowledges; leadership and workplace contexts and cultures.	M8 Helping people to judge the quality of the knowledge they use in practice	Transformation of knowledge/knowledge mobilisation	CPD that focuses on providing up to date knowledge about effective, safe practice will achieve knowledge transition if participants are supported to develop their skills in facilitation of others' learning and the blending of different knowledges; leadership and workplace contexts and cultures.
Transformation of work place/context	CPD that focuses on living shared organisational values across different boundaries will increase team effectiveness and organisational effectiveness that makes a positive difference to the experience of service users.	M12 Developing shared values	Transformation of work place/context	CPD that focuses on living shared organisational values across different boundaries will increase team effectiveness and organisational effectiveness that makes a positive difference to the experience of service users.

4.2. Four Transformation Theories

The literature review and stakeholder analyses (Phase 1) therefore led the project team to develop four transformational theories to enable CPD learning to be understood. We use 'Transformation' to describe "a *marked change in form, nature or appearance*" (Oxford English Dictionary) suggesting that CPD can be a powerful contribution to the transformation of the health and social care agenda.

The four transformation theories led to the development of hypotheses about the proposed relationships between the context in which CPD takes place, the mechanisms used and the outcomes achieved, specifically described as the MCO relationships in the realistic evaluation approach (Pawson and Tilley 2008). Table 10 presents the proposed transformation theories and MCO relationships identified as an outcome of Phase 1 prior to testing in phase 2. They are presented in a linear way for the purposes of simplicity.

The findings from Phase 2 led to both endorsement and refinements in the theories to build on the understandings previously proposed in Table 10. Additional perspectives from stakeholder engagement are illustrated in Appendix 6 using red fonts to illustrate the suggested embellishments. Integration of this feedback then informed the final transformational theories and MCO relationships presented in Tables 11, 12, 13, 14 below. As implied above, the focus of CPD users and or CPD providers may be across different CPD areas at any point in time, but the relationships and interdependences between the

areas were generally acknowledged as being important to understand if the full potential and impact of CPD was to be achieved. The findings from phase 2 for each transformational theory are now presented.

Theory 1: Transformation of Individual’s Professional Practice Through CPD

The theoretical relationships that describe the transformation of an individual’s professional practice through CPD are presented in Table 11 and this encompasses several MCO relationships.

Table 11: The Relationship Between Context, Mechanisms and Outcome that Describe and Explain the Transformation of Individual Professional Practice Through CPD

Mechanism	Context	Outcomes
<p>M1 Facilitated support and reflection</p> <p>M2 Developing skill in reflection and self-awareness</p> <p>M3 Self-assessment</p> <p>M4 Learning that is self-driven</p>	<p>Workplace context:</p> <p>C1 Opportunities for CPD that are work based</p> <p>C2 Culture of inquiry, learning, application and implementation</p> <p>Organisational context:</p> <p>C3 Enabling organisations that value work based learning & development</p>	<p>Person/individual related:</p> <p>O1 Increase self-awareness</p> <p>O2 Increase self-confidence, and increased perceived self-efficacy⁷</p> <p>O3 Transformational learning, new knowledge, & continuing motivation to learn</p> <p>O4 Empowerment, self-sufficiency and self-directing</p> <p>Role related:</p> <p>O5. Person centred safe & compassionate practice experienced by service users</p> <p>O6. Role clarity & opportunities for role innovation and development</p> <p>O7. Career development & progression</p> <p>O8. Meaningful positive engagement with change</p>

Both the workplace and organisation are key influencers on whether the outcomes of CPD are achieved for the individual because both the workplace and the organisation can negatively or positively impact on:

- What content is considered important to focus on in terms of learning and development.

1. Perceived self-efficacy is defined as ‘people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people feel, think, motivate themselves and behave. Such beliefs produce these diverse effects through four major processes. They include cognitive, motivational, affective and selection processes.’ (Bandura 1994).

- Whether the workplace is valued and used as a resource for learning and development; and,
- How the workplace is used to enable learning and development.

Work based learning is defined in this context as *'a process that concentrates on how learning takes place within the workplace. It is stimulated by workplace activities that engage the learner in discussion and debate with workplace colleagues. This critical dialogue, if facilitated and adequately resourced, can trigger a transformation of workplace culture into one that captures situated learning to enhance not only the individual, but also team and even organizational working practices.'* (Manley, Titchen and Hardy 2009:119).

Four key mechanisms have been endorsed in supporting individual professional practice: **M1**, enabling facilitated support and reflection; **M2**, developing skills in reflection and self-awareness; **M3**, undertaking a self-assessment; and **M4**, learning that is self-driven by the individual and their interests. The transformation outcomes for individual professional practice fall into two areas, those:

- About the individual as a person, such as confidence and self-efficacy (**O2**) which encompasses aspects such as: how people feel, think, motivate themselves and behave;
- To do with their role for example, the provision of person centred, safe and effective care to their own patients/clients (**O5**), role clarity (**O6**), career progression (**O7**).

In summary, the theory of transformation describing, explaining and predicting the mechanisms and outcomes for individual professional practice that will guide the development of impact indicators is as follows:

'CPD that is work based within a context that is enabling, inquiring and supportive and learner-driven, and centred on the provision of facilitated support and reflection and includes self-assessment and a focus on self-awareness will increase self-confidence, self-awareness, self-efficacy, role clarity, as well as create a positive attitude to change with opportunities for role & career development.'

For the individual, CPD impact will embrace aspects of all the three remaining transformational theories, although there will also be a focus on collective impact as a team, service, organisation and health economy in relation to how their contribution to achieving the primary purpose of CPD is understood.

Theory 2: Transformation of Skills to Meet Society's Changing Healthcare Needs Through CPD

This theory is underpinned by a concern for social justice that is focused on the provision of equality of opportunity for all learners irrespective of their personal characteristics or social background as well as the concept of moral agency i.e. we all have a responsibility to provide health and social care services that are inclusive and fit for purpose, meeting the needs of everyone in society.

The theoretical relationships that describe how skills are transformed to enable society's changing health and social care needs to be met are outlined in Table 12. Significant contextual factors emphasise a focus on a collective team approach to development of competence rather than the individual alone. Effective use of human resources and the need for flexible ways of working to meet the ever changing health needs of the population provide the immediate context for the skills focus in CPD.

The assumption underpinning this position is that no one person can deliver all the competences and skills required to support person centred safe and effective health care, so the focus is on a whole systems approach that enables the contribution of all to developing the full skill set required within a context that is ever changing, therefore the continuous review of skills required to maintain person centred safe and effective care is central.

Table 12: The Relationship Between Context, Mechanism and Outcome that Describe and Explain the Transformation of Skills to Meet Society's Changing Healthcare Needs Through CPD

Mechanism	Context	Outcomes
<p>M5 Assessment of systems and team skills and competences</p> <p>M6 Identifying systems & service needs/gaps</p> <p>M7 Expanding & maintaining skills and competences through a range of different ways</p> <p>M8 Developing team effectiveness</p>	<p>Workplace context: C4 A focus on team competences and effectiveness rather than just the individual</p> <p>Organisational context: C5 Value for money in the use of human resources and investment</p> <p>Healthcare context: C6 The need for staff in contemporary healthcare to be adaptable and flexible responding to ever changing healthcare needs</p>	<p>Outcomes for service users: O9 Improved continuity and consistency experienced by service users</p> <p>Outcomes for staff/team: O10 Better and sustained employability O11 Career progression O12 An effective cohesive team/ increased team effectiveness</p> <p>Outcomes for organisation/system O13 Better integration of services O14 Better partnerships with services and agencies O15 Better value for money from human resources through substitution and reduced duplication</p>

Four mechanisms have been endorsed as key to achieving the predicted outcomes within this specific context, namely: 1) the assessment of systems, team skills and competences; 2) identifying systems and service needs/gaps; 3) expanding and maintaining skills and competences through a range of different ways and 4) developing team effectiveness. The outcomes predicted impact on three areas:

- **Service users and clients** - there would be a continuity of service experience.
- **The team and its members** - there would be opportunities for career progression, better and sustained employability and an effective cohesive team with increased team effectiveness.
- **The organisation and system** - there would be: better integration of services; better partnerships with services and agencies; and better value for money from human resources through substitution and reduced duplication.

In summary,

‘CPD that focuses on the transformation of skills to meet society’s changing healthcare needs embracing team and system assessment to identify gaps and expand skills to meet a changing healthcare context will be reflected in better service user experiences of continuity and consistency of service provision, better employability and opportunities for career progression for individuals, more effective teams better organisational/systems outcomes around integration, partnerships and more effective use of human resources.’

Theory 3: Transformation of Knowledge Enabling Knowledge Translation Through CPD

The third interdependent transformation theory that captures our understanding about CPD focuses on knowledge, its uptake and use in practice. The theory in Table 13 describes, explains and predicts MCO relationships that focus on how knowledge is used through knowledge translation strategies that subsequently benefit service users, teams and organisations through the creation of knowledge rich cultures that nurture inquiry, creativity and innovation.

Table 13: The Relationship Between Context, Mechanism and Outcome that Describe and Explain the Transformation of Knowledge Enabling Knowledge Translation Through CPD

Mechanism	Context	Outcomes
M9 Helping people to reflect on the quality and range of knowledge they use in practice	Workplace context: C7 Engaging with and using different types of knowledge in everyday practice C8 Active sharing of knowledge in the workplace	Workplace/Team outcomes: O16 Knowledge used in and developed from practice O17 A knowledge-rich culture Team & Organisational outcomes O18-Active contribution to practice development/inquiry O19 Innovation & creativity
M10 Blending and melding different types of knowledge to guide practice		
M11-Facilitating dialogue ⁸ about how to use knowledge in practice		
M12 Facilitating active inquiry and evaluation of own and collective practice and learning		
M13 Developing practical and theoretical knowledge of leadership, facilitation evaluation and cultural aspects influencing knowledge translation in practice		

The significant context for this transformation theory is the immediate workplace culture in which people work. There is an expectation that staff will both value and recognise the

⁸ In dialogue, people freely and creatively explore issues, listen deeply to each other and suspend their own views in search of the truth. People in dialogue have access to a larger pool of knowledge than any one person enjoys. In a discussion, opposing views are presented and defended and the team searches for the best view to help make a team decision. In a discussion, people want their own views to be accepted by the group. The emphasis is on winning rather than on learning. Senge 5th discipline.

different types of knowledge required to enable person centred, safe and effective care to be achieved e.g. knowledge of the person being cared for; research evidence; expertise that has been rigorously deconstructed through reflection and peer review; local knowledge; policy etc. Contextual factors therefore include an explicit engagement with and use of different types of knowledge in everyday practice and a workplace culture that enables active sharing of knowledge.

The outcomes predicted in the theory identify not just that knowledge is used in the workplace but also the potential to impact on developing knowledge rich cultures where there is active contribution by staff to development, inquiry creativity and innovation. The six mechanisms through which these outcomes arise relate to three levels of activity; the first level focuses on the everyday decisions that inform professional practice with clients, such as reflecting on the quality and range of knowledge used in practice; and blending and melding different types of knowledge to guide practice. The second level focuses on a facilitation skill set required across workplace teams to enable others through dialogue about how to use knowledge in practice and through facilitating active inquiry and evaluation of own and collective practice and learning. The third level is more sophisticated and involves developing practical and theoretical knowledge about contextual factors that influence knowledge translation in practice, specifically: leadership, facilitation, evaluation and cultural aspects.

In summary:

'CPD in workplace contexts that both support and encourage engagement with and use of different types of knowledge in everyday practice and active sharing through CPD strategies that focus on: using and blending multiple knowledges⁹ to inform professional decision-making; skills in facilitating dialogue, active enquiry and evaluation; and, developing practical and theoretical knowledge fostering leadership, evaluation and culture will achieve knowledge rich cultures recognised by knowledge use and development, active inquiry, innovation and creativity.'

Theory 4: Transformation of Workplace Culture/Context to Implement Workplace and Organisational Values and Purpose Relating to Person Centred, Safe and Effective Care Through CPD

The fourth transformation theory focuses on CPD that addresses the immediate workplace culture and the implementation of shared values within the workplace, and across the organisation and the health economy. The workplace culture/context is identified as influential on the professional development and knowledge translation theories above, and so it has implications for both the impact of CPD and the content and focus of CPD.

The MCO relationships within this transformation theory acknowledge the need for a context where there are shared values and purposes, supported by an organisations readiness to change (Table 14). Organisational readiness is defined as *'a state of preparedness for change that is influenced by the organisation's previous history of change, its plans for*

⁹ Knowledges encompasses theoretical and practical knowledge, knowledge of the person being cared for/worked with, experience, expertise, artistry, creativity and local knowledge.

continuous organisational refinement, and its ability through its social and technical systems to initiate and sustain that change' (Ingersoll et al., 2000:13).

CPD mechanisms are influential on achieving CPD outcomes that positively impact on: how service users' experience the service; team effectiveness in relation to sustaining person centred, safe and effective care; and the organisational in terms of staff commitment and the development of leadership behaviours. These six key mechanisms are clustered around three areas:

(i) *Developing and implementing shared values and beliefs, specifically:*

- Developing shared values and a shared purpose.
- Facilitating the implementation of shared values through feedback, critical reflection, peer support and challenge.

(ii) *Evaluating experiences of shared values for staff and patients, specifically:*

- Evaluating experiences of shared values relating to person centred, safe and effective care from both service users and staff.

(iii) *Cultural and leadership skills required to achieve effective workplaces, specifically:*

- Creating a culture that enables individual personal growth, effective relationships and team work.
- Developing leadership behaviours.

Table 14: The Relationship Between Context, Mechanism and Outcome that Describe and Explain the Transformation Workplace Culture to Implement Workplace and Organisational Values and Purpose Relating to Person Centred, Safe and Effective Care Through CPD

Mechanism	Context	Outcomes
M14 Developing shared values and a shared purpose	C5 Context has explicit shared values and purposes	Service users: O20 Improved service user and provider experiences, outcomes and impact
M15 Facilitating the implementation of shared values through feedback, critical reflection, peer support and challenge	C6 Organisational readiness to change	Staff/team: O21 Sustained person centred, safe and effective workplace culture
M16 Evaluating experiences of shared values relating to person centred, safe and effective care from both service users and staff		O12 An effective cohesive team/ increased team effectiveness
M17 Creating a culture that enables individual personal growth, effective relationships and team work		Organisational: O22 Increased employee commitment to work and learning
M18 Developing leadership behaviours		O23 Organisational leadership and human behaviours
		O24 Increased organisational effectiveness

In summary,

‘CPD that takes place within contexts where there are shared values and purposes and organisational readiness that draws on CPD strategies which focus on: developing and implementing shared values; evaluating the experiences of service users and staff in relation to these values; and, developing skills in developing effective workplace cultures through leadership will achieve improved service user and provider experiences, outcomes and impact, sustained person centred, safe and effective workplace cultures and team effectiveness, increased employee commitment, organisational leadership and effectiveness.’

The four interdependent transformational theories that describe explain and predict the outcomes of CPD that have an impact on service users’ experience of person centred safe and effective care have been refined and endorsed through stakeholder engagement. These theories have been necessary to develop to make explicit the assumptions underpinning CPD, its purpose and the contexts and mechanism necessary to achieve related outcomes. From this basis, CPD outcomes can be linked to relevant indicators and approaches for capturing these. The findings around indicators of CPD are now presented.

4.3. Impact Indicators Useful for Determining the Impact of CPD

Potential indicators for demonstrating the outcomes and impact of transformation were identified through the methods used in Phase 1. Table 15 presents these initial indicators in random order. These were then tested in Phase 2 together with the MCO relationships. Nineteen participant stakeholders were asked to identify the frequency of use of the indicators identified in Table 16 in their current practice. This question was embellished to obtain more information from a further 18 participant stakeholders through three additional questions:

What are the easiest, hardest and most meaningful indicators to measure?

There were several responses for some individuals, and this explains the difference between the number of participants and the number of responses identified in the Table 16-18, where the findings are presented for each of the four transformational theories linked to impact at the different levels – individual, team, service and organisational.

Table 15: Illustrates the Indicators Identified at the End of Phase 1 (in no particular order) for the Outcomes of Each of the Transformation Theories

Transformation of individual professional practice	Transformation of skills to meet service provision for society's needs	Transformation of knowledge/knowledge translation	Transformation of work place teams/context to deliver on organisational values
Individual Indicators of effectiveness 1.1. Self awareness 1.2. Self confidence 1.3. Emotional intelligence 1.4. Critical Reflection 1.5. Role Clarity 1.6. Person centered practice 1.7. Compassion 1.8. Active Lifelong learning 1.9. Career progression & personal growth 1.10. Positive attitude to change 1.11. Skilled & competent 1.12. Active listening/ communication 1.13. Speaking up for human rights 1.14. Role Model 1.15. Using evidence systematically 1.16. Positive impact on patient experience 1.17. Creative problem solving	Service & Organisational/Systems Indicators 2.1. Shared purpose framework 2.2. Shared values 2.3. Inclusive culture 2.4. Commitment to LLL 2.5. Quality metrics 2.6. Effective use of Resources 2.7. Compliance with national standards 2.8. Whole systems working 2.9. Systems for shared governance 2.10. Good partner relations 2.11. Creativity & innovation 2.12. PPI and public trust 2.13. Organisational awareness & intelligence	Team & organisational Indicators 3.1. Shared vision & purpose for service 3.2. Person Centred culture 3.4. Effective levels of staffing 3.5. Patient safety metrics 3.6. Improved patient flow & discharge 3.7. Integrated working 3.8. Patient at heart of decision making 3.9. Systematic mechanism for capturing best and poor practice 3.10. Patient experience 3.11. Reviewing & improving standards/Clinical Audit)	Team & Organisational Indicators 4.1. Role clarity & responsibility 4.2. Shared vision & values 4.3. Interdisciplinary team working 4.4. Person centered team culture 4.5. Collaborative decision making 4.6. Effective team communication 4.7. Positive learning culture 4.8. High challenge & support 4.9. Innovation & creativity 4.10. Peer learning & review 4.11. Commitment to lifelong learning 4.12. Skilled facilitation of others 4.13. Systematic use of evidence to inform practice

The four transformation theories describe, explain and predict the CPD outcomes associated with individual professional practice, skills for service provision, knowledge translation and work place teams/context, although as previously recognised the theories are interdependent. This interdependence is echoed through the impact they have across different levels - individual, team, service and organisational levels. For the indicators identified a range of different ways for measuring or demonstrating them is also identified.

4.3.1. CPD That Transforms Individual Professional Practice

The outcomes identified from the theory of transforming individuals' professional practice focuses on impact at the individual level; on self as an individual person and role with its subsequent impact on individual service users and their experience.

The impact indicators for CPD most frequently used (Table 16) to judge the impact of individual professional practice embrace both the outcomes of Individual transformation (Table 11) and the mechanisms of knowledge translation (Table 13) with the most frequently used indicators from Table 16 linked in brackets to the relevant MCO component below:

Table 16: Individual Indicators: Theory 1 - Transformation of Individual's Professional Practice (number in brackets = the total number of responses from either 19 or 18 participants)

Frequency of Use (n=19)	Easiest to Measure (n=18)	Hardest to Measure (n=18)	Most Worthwhile to Measure (n=18)
1.6 person centred practice (24)	1.17 creative problem solving (6)	1.2 self-confidence (3)	1.3 emotional intelligence (2)
1.15. using evidence systematically (24)	1.1 self-awareness (5)	1.12 active listening/communication (3)	1.4 critical reflection (2)
1.3.emotional intelligence (20)	1.11 skilled and competent (5)	1.6 person centred practice (3)	1.6 person centred practice (2)
1.4 critical reflection (19)	1.4 critical reflection (4)	1.1 self-awareness (2)	1.10 positive attitude to change (1)
1.2. self-confidence (17)	1.8 active lifelong learning (4)	1.13 speaking up for human rights (2)	
1.1. self-awareness (16)	1.10 positive attitude to change(4)	1.14 role model (2)	1.11 skilled and competent (1)
1.5. role clarity (16)	1.7 compassion (3)	systematically	1.15 using evidence systematically (2)
1.9. career progression and personal growth (16)	1.13 speaking up for human rights (3)	1.3 emotional intelligence (2)	1.16positive impact on patient(1)
1.16. positive impact on patient experience (15)	1.15 using evidence systematically (3)	1.5 role clarity (2)	1.17 creative problem solving(1)
1.7. compassion(13)	1.9 career progression and personal growth (3)	1.8 active lifelong learning (2)	
1.14. role model (12)	1.5 role clarity (2)	1.16positive impact on patient (2)	
1.11. skilled and competent (11)	1.6 person centred practice (2)	1.4 critical reflection(1)	
1.12.active listening/communication(11)	1.16 positive impact on patient experience (2)	1.7 compassion (1)	
1.13. speaking up for human rights(11)	1.2 self-confidence (2)	1.9 career progression and personal growth (1)	
1.17 creative problem solving (10)	1.3 emotional intelligence (1)	1.10 positive attitude to change (1)	
1.10 (9) positive attitude to change	1.14 role model (2)	1.17 creative problem solving (1)	
1.8. (8) Active lifelong learning			

Person centred practice (O5), with the related concepts of **positive impact on patient experience** and compassion slightly lower in frequency.

- **The systematic use of evidence (M9-M12)** – mechanisms for knowledge translation),
- **Emotional intelligence**, (a component of both **O1 & O2** with its focus on increased self-awareness , confidence, self –efficacy, all of which are all frequently used, albeit slightly lower down the frequently list).
- **Critical reflection (M2)**.

- **Role clarity (O6).**
- **Career progression (O7).**

Other outcomes identified as integral to MCO relationships are recognised through indicators such as **'positive attitude to change' (O8)** and **'active learning' (O8)**. Only **O4** – 'Empowerment, self-sufficiency and self-direction' appears not to be measured. Also creative problem solving is listed as a frequently used indicator not reflected explicitly in MCO relationships but an outcome of Transformation of Knowledge (**O19**). This needs to either be made explicit or considered an implicit aspect of Outcome 3 – transformational learning.

A number of other frequently used measures were also identified around skills and competence, listening and communication which link to Transformation of Skills to meet Society's changing needs. There were lower responses to the other three questions, inferring that they were either difficult to answer or had not been thought about. **Creative problem solving, self-awareness and critical reflection** were considered easiest to measure and **self-confidence, active listening and person centred practice** considered harder to measure. There was no strong response about what was considered most worthwhile to measure at the individual level.

In summary all the outcomes highlighted in the transformation of individual professional practice are measured frequently using impact indicators at the individual level, with the slight exception of 'empowerment, self-sufficiency and self-directing' (**O4**). Other indicators frequently used that are not explicitly reflected in the MCO relationships include creative problem-solving. Little further insight is provided from exploring what is easier, harder and worthwhile to measure.

The ways that impact indicators can be measured or demonstrated at the individual level are outlined in Figure 11 where they could also be linked to specific process outcomes (associated with mechanisms) or transformation outcomes for the individual across the four transformation theories.

Figure 11: Ways of Measuring Individual Indicators of CPD Impact

- Personal profile (**O1-O4, O5-O8, O10, O11**)
- Portfolio (**O1-O8, M9, M10**)
- Critical reflection (**M2, O3**)
- Self-assessment (**M3**)
- Results from essays and portfolios (**O1-O8, M9, M10**)
- Reflective models (**M2, M9, M10, O16**)
- Formal and some informal assessment using anecdotal evidence (**O5, O6, M3**)
- Transformational journey stories (**O3, O4, O7**)
- Audit and measure impact at the patient bedside in terms of individual transformation (**O2, O4, O5**)
- Shadowing – walk the talk with them (**M1**)

4.3.2. CPD that Transforms Skills to Meet Society's Needs

The outcomes of transforming skills to meet society's changing health care needs in Table 12 are linked to impact at three levels – service users; staff team and the organisation or health care system. The most frequently used indicators (Table 17) involved responses that focus on judgments in relation to:

- A shared purpose framework, shared values (**C5** In transformation theory 4).
- Inclusive culture – an aspect of team work.
- Compliance with national standards – could be linked to team effectiveness outcomes (**O12**).
- Good partner relations; also linked to whole systems working (**O14**).
- Effective use of resources (**C6, O15**).

Table 17: Frequency of Indicators Used for Measuring Outcomes of CPD Focusing on Skills Development: Theory 2 - Transformation of Skills to Meet Service Provision for Society's Needs

Frequency of Use (n=19)	Easiest to Measure (n=18)	Hardest to Measure (n=18)	Most Worthwhile to Measure (n=18)
2.1. (12) shared purpose framework	2.6 effective use of resources (4)	2.11 creativity & innovation (5)	2.3 inclusive culture (4)
2.3. (10) inclusive culture	2.5 quality metrics (3)	2.3 inclusive culture (4)	2.1 shared purpose framework (3)
2.7. (10) compliance with national standards	2.7 compliance with national standards (3)	2.2 shared values (3)	2.2 shared values (2)
2.10. (10) good partner relations	2.9 systems for shared governance(3)	2.8 whole systems working (3)	2.4 commitment to lifelong learning(1)
2.6.(9) effective use of resources	2.10 good partner relations (2)	2.12 PPI and public trust(3)	2.5 quality metrics (1)
2.2.(8) shared values	2.11creativity & innovation (2)	2.5 quality metrics (2)	2.6 effective use of resources (1)
2.8. (8) whole systems working	2.2 shared values (1)	2.6 effective use of resources (2)	2.8 whole systems working (1)
2.11. (7) creativity and innovation	2.3 inclusive culture(1)	2.4 commitment to lifelong learning (1)	2.9 systems for shared governance (1)
2.12.(7) PPI and public trust	2.4 commitment to lifelong learning (1)	2.10 good partner relations (1)	2.12 PPI and public trust(1)
2.5. (6) quality metrics	2.8 whole systems working (1)	2.13 organisational awareness and intelligence (1)	
2.9.(6) systems for shared governance	2.13 organisational awareness and intelligence (1)		
2.13 (6) organisational awareness and intelligence			
2.4. (2) commitment to Lifelong learning			

Other indicators frequently used include **creativity** and **innovation**, **public patient engagement** and **public trust**, **quality metrics**, **systems of shared governance** and **organisational awareness and intelligence** – the latter linking into the mechanism **M5**, **and M6**. The easier indicators to measure were perceived to be around effective use of resources and the hardest included creativity and innovation and inclusive culture. However, inclusive culture was considered to be the most worthwhile indicator to measure.

From the perspective of impact on service users, no suggestions were made about how indicators for capturing impact on service users could be determined in relation to continuity and consistency (**O9**), except implicitly through compliance with national standards. At the staff/team level, no mention is made of how the impact on staff outcomes (**O10-O11**) are determined, although inferred indicators of team effectiveness (**O12**) is slightly implied through assessment against shared purposes and shared values, an inclusive culture and

good partner relations. At the systems level **O12-O15** is implied through good partner relations and systems working.

The impact of CPD therefore on service users and teams in particular needs to be given more attention, although through using some of the ways that impact can be demonstrated in Figure 12 it would be possible to use the MCO relationships to guide individual and team illustrations, case studies and stories that demonstrate these links effectively.

Figure 12: Examples of How Impact Could be Measured or Demonstrated

- Service user feedback
- Standards reached as part of a registration process e.g. HCPC
- Competences around audit, evaluation may be service focused for a team
- Mandatory training update
- Being involved in external society, representation on committees, service user feedback
- Transformational journey stories
- Assessment of competence in practice
- Dissemination of work more widely nationally
- Feedback, 15 step challenge
- Work closely with stakeholders so they have influence

4.3.3. CPD that Transforms Knowledge/Knowledge Translation

The transformation of knowledge outcomes is linked to impact at the team and organisational level (Table 13). Table 18 identifies the most frequently used indicators of knowledge transformation identified by stakeholders focused on impact associated with interdependent aspects of the other transformation theories:

- Patient experience, patient at the heart of decision-making, Person centred culture (**O21** in transformation of workplace context).
- Shared vision and purpose of the service (**C5**).
- Integrated working (**O13**) in transformation of skills.

Improving and reviewing standards/clinical audit, systematic mechanisms for capturing best and poor practice and patient safety metrics, may suggest that knowledge is used and developed in practice (**O16**). In terms of those indicators easiest and hardest to measure as well as the most worthwhile, there is implied suggestion that different types of knowledge are blended and used (**M10**). However, in terms of outcomes that would provide impact on the culture at team and organisational level (**O17, O18**) these are less obvious in the form that has been captured for review. **O19** is highlighted in other transformation theories as an indicator.

In summary, there is a need to look at indicators of knowledge translation more specifically. The lack of them may reflect the lower priority that has historically been given to knowledge translation, although it is a growing and powerful discipline with implications for how resources are used more smartly. More attention needs to be given to the mechanisms of knowledge translation in CPD and both different approaches to demonstrating impact and the use of different types of knowledge to achieve the outcomes identified in the MCO relationships. Even though specific indicators may need to be identified for the future, impact can still be demonstrated through using some of the ways identified in Figure 13, using the MCO relationships to illustrate stories and case studies of impact.

Figure 13: Examples of How They Could be Measured or Recognised

- Evaluation to test impact of attendance on training
- Feedback from study days
- Transformational journey stories
- Post CPD evaluation against measures which are SMART
- Feedback, 15 step challenge

Table 18: Frequency of Service Impact Indicators Used to Measure Knowledge Mobilisation: Theory 3 - Transformation of Knowledge/Knowledge Mobilisation

4.3.4. CPD That Transforms Workplace Teams/Context to Deliver on Organisational Values

Frequency of Use(n=19)	Easiest to Measure(n=18)	Hardest to Measure (n=18)	Most Worthwhile to Measure (n=18)
3.10 (17) patient experience	3.4 effective levels of staffing (2)	3.8 patient at the heart of decision making(4)	3.1 shared vision & purpose for service (2)
3.1 (13) shared vision & purpose for service	3.5 patient safety metrics (2)	3.1 shared vision & purpose for service (3)	3.4 effective levels of staffing(1)
3.2 (10) person centred culture	3.6 improved patient flow and discharge (2)	3.4 effective levels of staffing(3)	3.9 systematic mechanism for capturing best and poor practice (1)
3.7 (10) integrated working	3.7 integrated working	3.7 integrated working (3)	3.11 reviewing and improving standards/ clinical audit (1)
3.11 (9) reviewing & improving standards/ clinical audit	3.9 systematic mechanism for capturing best and poor practice (2)	3.2 patient centred culture(2)	3.11 reviewing and improving standards/ clinical audit (1)
3.5 (8) patient safety metrics	3.10 patient experience (2)	3.10 patient experience (2)	
3.8 (8) patient at the heart of decision making	3.11 reviewing and improving standards/ clinical audit (2)	3.5 patient safety metrics(1)	
3.9 (8) systematic mechanism for capturing best and poor practice	3.1 shared vision & purpose for service (1)		
3.4 (4) effective levels of staffing	3.2 patient centred culture (1)		
3.6 (4) improved patient flow and discharge			

The final transformational theory has already been widely touched on in relation to aspects of other transformation theories, demonstrating its interrelationship with them. The outcomes of transforming teams and contexts highlighted through the MCO relationships in Table 14 demonstrate impact at three levels – service users, staff/team and the organisational levels.

The most frequent indicator cited was the **systematic use of evidence to inform practice**, however, we acknowledge that this is linked more readily to the theory for knowledge translation for the workplace and outcomes 16 and 17, although the cultural aspects of knowledge translation (**O17**) were previously missing when considering indicators of the impact of knowledge translation.

Other frequently cited indicators include:

- Aspects of **team effectiveness (O12)**: such as: role clarity and responsibility, interdisciplinary team working, shared vision and values, collaborative decision-making, and peer learning and review; and
- A sustained person centred safe and effective culture (**O21**).

The indicators identified most frequently were also considered the easiest to measure i.e. role clarity, and responsibility, positive learning culture. Whereas a person centred team culture and innovation and creativity was considered hardest to measure. The most worthwhile indicator to measure was identified as the experience of high challenge and high support.

The CPD outcomes from Table 14 not addressed by indicators included: improved patients and user experience (**O20**). There is also no mention of indicators that reflect organisational outcomes around employee commitment to working and learning – yet this is implied by a focus on positive learning; lacking focus on leadership and organisational effectiveness (**O23, O24**).

Once again the lack of indicators in some areas can be overcome by demonstrating impact through using approaches outlined in Figure 14, which are structured around the MCO relationships to demonstrate Impact at the different levels.

Figure 14: Examples of How CPD Outcomes for Workplace Culture/Context Could be Measured

- Critical reflection
- 360 degree feedback tools
- Ongoing supervision integrated with yearly, and mid yearly reviews
- Service indicators and organisational quality metrics like mortality rates, readmission rates etc.
- Formal and some informal assessment using anecdotal evidence
- Transformational journey stories
- Audit and measure impact at the patient bedside in terms of team transformation
- Tools that collate multiple data sources, triangulate information, explore patterns and systems balancing quantifiable and qualifiable evidence of formulations
- Publication rates and awards for organisations
- Shadowing – walk the talk with them.
- Pre and post NHS Leadership assessment
- Feedback, 15 step challenge.
- Convey indicators to providers at outset of measures that will be applied

Summary of Findings

The findings have demonstrated the connections and interrelationships between the: primary and related purposes of CPD; the transformation theories that describe, explain and predict how transformation occurs in CPD; and, the influences of the workplace and health and social contexts in which CPD takes place.

A whole systems approach illustrates how the workplace is the focus of CPD and also an influence on it. The organisational, health and social contexts are similarly influential as inputs to and potential beneficiaries of CPD.

The primary purpose of CPD is service users' experiences of health and social care and that this is person centred, safe and effective. This is linked to CPD that focuses on the individual's as well as the team's journey of transformation in their work and their workplace, specifically the transformation of:

- The individual's professional practice.
- Skills to meet a continually changing context, and finally.
- Knowledge so that it is used and blended with other knowledge¹⁰ in practice through knowledge translation.
- The workplace culture/context.

Clarity about the purpose of CPD, its underlying assumptions and how it is achieved has informed the identification of indicators of CPD across the four transformation areas and these have enabled impact at the level of the individual, team, service and organisation to be identified, explored and tested.

The MCO relationships have been refined and endorsed, similarly the interdependence, across different areas of CPD outcomes, and impact across different levels have been recognised.

Many general indicators of impact have been considered which can be used to demonstrate impact at different levels, although some indicators are recognised as subsets of broader indicators. Several indicators can be aligned more discreetly with specific outcomes for different transformation areas. Whilst the indicators of impact at the individual level are more focused and discreet it is imperative that more specific indicators of impact are also identified for other levels, such as the service or the organisational. A weak area is knowledge translation, and more specific focus needs to be given to demonstrating the impact in this area. The importance of working with CPD indicators around culture/contexts is vital as it is a pre-requisite for achieving maximum impact across all levels and in other areas of transformation. Ways for demonstrating impact have been identified and these have highlighted the power of using the MCO frameworks for demonstrating impact through approaches that embrace portfolios, narratives, stories and case studies at all levels.

¹⁰ Knowledge encompasses theoretical and practical knowledge, knowledge of the person being cared for/worked with, experience, expertise, artistry, creativity and local knowledge.

A key finding is the interdependence, and therefore the necessity to attend to all transformation processes in CPD if learning is to fulfil its full potential impact at the individual, team, service and organisational level to meet the ever changing needs of contemporary health and social care.

5. Discussion

Our findings have concluded that in order for CPD to be effective it has to address all of the outcomes for individual, team, service and organisational transformation because they are interrelated and interdependent. We acknowledge that we have taken a very radical and joined up approach to this work aimed at CPD for whole systems transformation, which includes the:

- ✚ **Inputs** to CPD e.g. stakeholders expectations and requirements, contextual factors around CPD provision.
- ✚ **Processes of transformation** in CPD, informed by the literature and different philosophical understanding underpinning education, learning and its purpose.
- ✚ **Outputs, outcomes, and individual, team and organisational impact** of CPD.

We demonstrated in our findings that the main purpose of CPD is the delivery of person centred safe and effective evidence informed care in the workplace. The four related purposes of CPD focus on the individual's, as well as the team's journey of transformation in their work and their workplace, specifically the transformation of:

- The individual's professional practice.
- Skills to meet a continually changing context.
- Knowledge so that it is used and blended with other knowledges¹¹ in practice through knowledge translation approaches.
- The workplace culture/context.

Although all four theories are important and interdependent, there is a need to focus on some areas before others if the primary purpose is to be achieved optimally and consistently. All four purposes of CPD could be focused on independently but CPD in some areas could optimize the impact in other areas. *Transformation of workplace culture/context and individual professional practice* are important pre-requisites to the other two sub purposes of CPD if the transformation of skills and transformation of knowledge are to achieve their full impact in the workplace on service users. Therefore, we should be focusing on the development of individual professional practitioners as transformational whole systems leaders in order to reap the benefits of enhanced knowledge and skills that will, in turn, promote enhanced team effectiveness in the workplace in an ever changing context in order to capitalise on CPD resources and investment. Effective leadership needs to be built on individual practice that focuses on self-awareness and role clarity – important prerequisites for leadership. This also requires us to focus on improving the knowledge translation skills of the existing workforce. If we could harness and use the knowledge and know how we already have in the health professions more effectively we could save so many more lives.

¹¹ Knowledges encompasses theoretical and practical knowledge, knowledge of the person being cared for/worked with, experience, expertise, artistry, creativity and local knowledge.

Our findings indicated that both the workplace and organisation are key influencers on whether the outcomes of CPD are achieved for the individual, because both the workplace and the organisation can negatively or positively impact on what is considered important to focus on in terms of learning and development content, whether the workplace can be used as a resource for learning and how learning and development may be enabled. The focus of CPD users and CPD providers may be across different transformational areas at any point in time, but the relationships and interdependences between the areas were generally acknowledged as being important to understand if the full potential and impact of CPD was to be achieved.

We concur that there is no single specific CPD impact indicator that can be used in isolation to capture the entire impact of CPD learning, and in fact we would recommend using a range of these to demonstrate impact in different circumstances. It is very much dependent on (i) *who* is going to be using the Tool, (ii) *how* it is going to be used and in *what* context, and (iii) *when* it is going to be used. This is illustrated in the next section of the report which presents impact case stories for each transformation theory to demonstrate how the CPD Impact Tool can be used by individual professional practitioners, providers of CPD and commissioners of CPD and services. In each story the ways in which impact can be measured and evidenced are identified to demonstrate the interdependence and interrelationships across the whole system and which measures might be used in different contexts. We anticipate further developing case studies to illustrate application to different contexts and service user audiences in the future.

We acknowledge that there is a need to develop more specific indicators for knowledge translation to demonstrate evidence of use and impact in the workplace on patient outcomes, and this forms one of our key recommendations for further work. Some indicators are also subsets of others e.g. the indicator for self-awareness and self-confidence could be collated into one indicator for self-efficacy. However, as a whole we are confident that the Tool offers a comprehensive and holistic mechanism for capturing impact in the four domains.

As we continue to use the Tool we will gain greater insights into its coherency and its contribution to the contemporary health and social care and educational agendas. However to work in a whole systems integrated way it is important that we role model how to integrate these agendas using the CPD Impact Tool so that it offers maximum benefits to all stakeholders with vested interests in CPD at a national level. No one person can deliver all the competences and skills required to support person centred safe and effective health care, so national whole systems ways of working to implement the Tool would enable a unified approach to developing the full skill set required within a context that is ever changing; therefore the continuous review of skills required to maintain person centred safe and effective care is central.

In relation to the theory of transforming skills to meet society's changing needs, the CPD Impact Tool offers particular value in terms of demonstrating the evidence and impact of achieving national occupation standards that relate to professional competence for the individual, team, organisation, HEIs and commissioners of CPD learning and professional regulators. There is a need to look at indicators of knowledge translation much more specifically. This may reflect the lower priority that has historically been given to knowledge translation, although it is a growing and powerful discipline with implications for how

resources are used more smartly. We have identified that more attention needs to be given to the mechanisms of knowledge translation in CPD and both different approaches to demonstrating impact and the use of different types of knowledge to achieve the outcomes identified in the MCO relationships; even though specific indicators may need to be identified for the future.

Our critical reflections as a research team on our learning journey echo the definition proposed by Manley, Titchen and Hardy (2009:119) in their concept analysis paper that states, *“work-based learning is a process that concentrates on how learning takes place within the workplace. It is stimulated by workplace activities that engage the learner in discussion and debate with workplace colleagues. This critical dialogue, if facilitated and adequately resourced, can trigger a transformation of workplace culture into one that captures situated learning to enhance not only the individual, but also team and even organizational working practices”*.

We recognise that this work challenges our current understanding and practice of how and where education could/should be best provided and the skill sets required to facilitate learning, development, inquiry, improvement and innovation in the workplace. It challenges traditional modes of learning within a classroom because we advocate the use of active and action learning as it is important to acknowledge that learning is at its most powerful when people can learn in real time using their workplace as the focal point through active learning mechanisms and processes. This enables practitioners to celebrate achievements and good things about their workplace services and practices, but also to recognise, challenge and take action against aspects of practice that require improvement. It enables practitioners to generate critical questions about their practice for focused innovation and improvement that starts with self-awareness and improvement, and moves through a broader more integrated appreciation of their role in achieving shared goals within a team and a service recognising and celebrating the contribution they have made to the organisation as a whole and therefore the public or community they serve.

As we write this report, such an approach is gathering momentum nationally by the School for Health and Social Care Radicals movement being led by NHSIQ (www.theedge.nhsiq.nhs.uk/school/), although they have no integrated tool that can measure impact at each level of transformation and this is where the CPD Impact Tool would be invaluable in providing evidence of the impact of whole system learning for participants. Similarly there is a growth of workplace professional programmes to address workforce shortages and frustrations with the length of time it takes for health professionals to get onto and complete CPD programmes in HEIs. For example St Bartholomew’s Hospital Accident and Emergency (A&E) Department found that local university programmes for specialist A&E courses were too expensive and had long waiting lists. They were only able to send small numbers of practitioners on the programmes and had difficulty retaining their expertise once qualified. Instead they are now running their own programme across 3 A&E departments involving the whole team and all the professions working in the departments to support learning and development. To date they have moved 68 people through the programme at one third of the cost of the programme run by the local university and have approached alternative organisations for professional accreditation. Other examples include the NHS Leadership Academy programmes and a new initiative in the north of England to commission nursing pre-registration numbers independently of Health Education England.

It may be the case that the concept of programme validation in universities is outdated because by the time a curriculum moves through development to implementation to curriculum revalidation (4 years) society's needs have moved on and the workforce may look very different and require different types of knowledge and skills sets. We argue that the curriculum should focus on the top level skills needed to facilitate workplace leadership and transformation because workplace culture is so influential on the professional development of individuals and teams and knowledge translation and implementation in the workplace. These top levels skills are:

(i) Developing and implementing shared values and beliefs, specifically:

- Developing shared values and a shared purpose.
- Facilitating the implementation of shared values through feedback, critical reflection and peer support and challenge.

(ii) Evaluating experiences of shared values for staff and patients, specifically:

- Evaluating experiences of shared values relating to person centred, safe and effective care from both service users and staff.

(iii) Cultural and leadership skills required to achieve effective workplaces, specifically:

- Creating a culture that enables individual personal growth, effective relationships and team work.
- Developing leadership behaviours.

For HEIs the CPD Impact Tool offers an integrated framework that is underpinned by robust philosophical understandings of the purposes of different educational theories and their application to the workplace. It offers the potential for HEIs to use it as a benchmark tool when developing new curriculum to ensure that the design of learning, teaching and assessment strategies are able to demonstrate impact on practice at the four transformational levels. This will enable HEIs to develop their evaluation strategies to maximize demonstration of impact using the impact indicator measures so that they are able to demonstrate more clearly to the public, regulatory bodies, education commissioners, service providers, service users and CPD learners the value of their programmes for supporting workforce development and workplace transformation. The CPD Impact Tool provides the mechanisms, contexts and outcomes that link work based learning knowledge skills and knowhow with the skills needed for effective health and social care. Further it will enable HEIs to demonstrate the impact of learning on professional values, behaviours and impacts on patient outcomes – a feature of the Research Excellence Framework.

Taking the theory of transformation of individual professional practice, it is important to recognise that many health and social care practitioners working at the front line of care experience a very real disconnect between the espoused values of the organisation (organisational culture) and the realities of the workplace culture at the front line in their relationships with patients and service users (workplace culture). They are, in the main, within large organisations excluded from meaningful consultation in creating organisational mission and vision statements and instead the agents of delivery. This means that for the majority there is little connected meaning for them in their daily contact with patients. The

CPD Impact Tool provides an important framework to guide CPD learning and an invaluable structure on which to develop a professional portfolio evidence for professional development and future revalidation to meet the requirements of regulatory bodies. It enables practitioners to focus firstly on developing and leading self as a transformational agent, moving through to thinking about how they engage and build relationships with others in their team so that there is meaningful partnership and collaboration – the pre-requisites for leadership and culture change.

5.1. Impact Case Stories- Applying the CPD Impact Tool to Practice

A range of case stories have been developed to demonstrate the application of the CPD Impact Tool in practice. Each story is related to the four theories of transformation and identifies potential ways in which CPD impact may be measured to promote transformation of self, team, service and organisation to achieve the outcomes of transformation. These stories have attempted to use different professional practice contexts and disciplines and demonstrate the interrelationship and interdependence of the four transformation theories in practice. In our future work, we intend to develop a bank of illustrative care stories for different stakeholder groups, and this forms one of our key recommendations. Additional stories are provided in Appendix 4-5.

5.1.1 Transformation of Individual's Professional Practice

CPD that is work based within a context that is enabling, inquiring and supportive and learner-driven, and centred on the provision of facilitated support and reflection and includes self-assessment and a focus on self-awareness, will increase self-confidence, self-awareness, and self-efficacy and role clarity, as well as create a positive attitude to change with opportunities for role & career development.

Case Story: Aspiring Consultant Practitioner Programme – Improving Learning Disability Services

A commissioned CPD initiative within a large NHS Acute Trust has been designed to develop opportunities to develop the Consultant Practitioner workforce as whole systems transformational clinical leaders for integrated services across the health economy. The initiative is designed to help aspiring consultants to develop their understanding of the role and attributes of the Consultant Practitioner, develop a personal action plan and ultimately a portfolio of evidence to demonstrate their readiness to apply for a consultant post.

The programme provides the opportunity to:

- Explore the role of the consultant practitioner, the qualities and skills required.
- Self-assess against the Trust's Consultant Practitioner competences, identifying areas for development.
- Undertake a qualitative 360 degree review to inform the development of a personal action plan integrated with feedback from the self-assessment.
- Participate in active and shared learning with peers in a safe learning community.
- Develop skills in facilitating learning, development and improvement.

- Recognise, develop and evaluate effective workplace culture.
- Grow skills in clinical, political and strategic leadership and consultancy.
- Build a broad and deep appreciation of different approaches to research, evaluation and scholarly inquiry.
- Develop a portfolio of evidence against the Trust's shared purpose framework at consultant level which can be submitted to achieve Master's credits through academic accreditation, or to prepare for a clinical doctorate.

An aspiring Consultant Practitioner working in the field of learning disability services commences the programme. He works with a critical companion throughout the programme to enable him to critically reflect and focus on the priorities for his learning and development **(M1-4)**. As part of the self-assessment process he could use the CPD Impact Tool as a foundation for self-assessment at the start of the programme to identify aspects of his practice that require development, and triangulate his assessment with the findings from assessment of his own leadership strengths and Consultant Practitioner competence **(M2-4)**. Using a 360 degree feedback tool to gather review data from his team, he can then identify what actions need to be taken to develop himself, his team and the quality of services across his organisation to benefit the local population and wider health economy **(M4)**.

He uses learning opportunities on the programme to focus on developing a project idea to establish a Community of Practice for Learning Disabilities. Drawing on advice and support from his critical companion and national leaders in the field with relevant expertise, he achieves this by establishing a series of facilitated workshops with interested stakeholder and service user groups to develop a shared vision for future service improvements across his local economy and a consensus action plan of priorities for development. The action plan is presented to the NHS Trust Board and his local Clinical Commissioning Group who agree to support the initiative **(O1, O 2, O 3, O4, O5, O6)**.

The resultant Community of Practice for Learning Disabilities forms a regional network for health and social care practitioners and service users to come together with commissioners, researchers and academics to develop a person centred partnership approach to facilitating learning, development, inquiry and improvement in the local economy **(O4, O5, O6)**. Key priorities are identified as developing undergraduate pre-registration curriculum to be more inclusive of learning disabilities and providing more flexibility for placements across the region with local universities, and a research project aimed at improving the physical health assessment of service users in community settings which is identified as a major national risk factor. The findings of the work are submitted for publication to a peer reviewed journal and accepted for presentation at a national conference **(O3, O7-8)**. The research proposal is developed for a PhD application and the evidence of impact of his work enables him to create a business case for the establishment of a Consultant Practitioner role in learning disabilities **(O8)**. He is successful in having his business case supported by the NHS Trust Board and in his application for the role. He shares the outcome of his work and his person centred development journey at an organisational celebration event to showcase the learning and development that has taken place, to promote role clarity and contribution **(O1-6)** and to build organisational, service and team awareness of the importance of learning, development, inquiry, improvement and innovation in the workplace **(O6-8)**.

An outcome of the programme is that the Trust has used the evidence of innovation across its services to lobby workforce planners to create six new Consultant Practitioner posts

across the organisation. The CCGs are considering a plan to commission more joint appointments as a result for whole systems leadership across the integrated health and social care workforce as part of the five year forwards planning to strengthen future workforce.

In this case example, the evidence of impact might be demonstrated through:

- Self-assessment against leadership competence frameworks.
- 360 degree feedback and personal development action plan.
- Reflective portfolio.
- Community of Practice TOR and Vision.
- Celebration conference presentation.
- Article for publication.
- PhD proposal.
- Job application.

Using these mechanisms of assessment will enable the practitioner to demonstrate impact at both individual and team level, to demonstrate increased self-awareness (1.1) and self-confidence (1.2), critical reflection (1.4), role clarity for self and team (1.5,4.1, 4.2), person centred practice (1.6, 4.3, 4.4, 4.5), using evidence systematically in practice (1.15, 4.13), to make a positive impact on patient experience (1.16, 4.4, 4.5, 4.10, 4.12), role modelling leadership skills and encouraging these skills to be developed in her team (1.14, 4.12) and using creative problem solving skills to help the team to learn from patient feedback (1.17, 4.9, 4.10, 4.14). As a Consultant Practitioner it would be important to demonstrate how his work also impacted at service and organisational level and hence the following impact indicators could be measured through the different forms of evidence outlined above - shared purpose (2.1), shared values (2.2), creating an inclusive culture (2.3), commitment to lifelong learning (2.4), patient safety metrics (2.5), effective use of resources (2.6), compliance with national standards (2.7), whole systems working (2.8), systems of shared governance (2.9), shared vision for the service (3.1), creating person centred cultures (3.2), patient safety metrics (3.5), integrated working (3.7), patient at the heart of decision making (3.8), systematic ways of capturing best practice (3.9), patient experience (3.10) and reviewing and improving standards (3.11).

5.1.2. Transformation of Skills to Meet Society's Changing Healthcare Needs

CPD for the transformation of skills to meet society's changing healthcare needs that focuses on team and system assessment to identify gaps and expand skills to meet a changing healthcare context, will be reflected in better service user experiences of continuity and consistency of service provision, better employability and opportunities for career progression for individuals, more effective teams and better organisational/systems outcomes around integration, partnerships and more effective use of human resources.

Case Story- Transforming Urgent and Emergency Care Services

A CPD initiative to develop programmes of learning in preparation for new roles in the urgent and emergency care workforce are identified by commissioners as a priority to address workforce, recruitment and retention issues in urgent and emergency care services in primary and secondary care settings. New roles include Physicians Associates and Advanced Practice Whole Systems Leaders. Evidence from a commissioned research project provides the foundation for the development plan to promote sustainable transformational change, and to address what the future workforce should look like. The initiative enables CPD to be designed around workforce and workplace need involving multiple stakeholders.

The evidence focuses on mechanisms which:

- Identify current gaps and 'pinch-points' in urgent care pathways through developing a gap analysis tool **(M5, M6)**.
- Identify the current and future competences required to provide a seamless and integrated service now and in the future **(M5, M6, M8)**.
- Provide an options analysis for how the workforce will be developed to pave the way for curriculum modifications and developments required within higher and further education to inform a workforce development plan that focuses on the development of the future workforce needed to deliver high quality integrated urgent and emergency care across the patient pathway **(M6, M7, M8)**.

The outcomes that form the foundation of the CPD initiative are:

- A gap analysis tool to identify gaps and 'pinch points' in the urgent and emergency workforce and the competences required for an integrated urgent and emergency whole systems approach **(O9-O15)**.
- Triangulated data that identifies the enabling factors, characteristics, inputs, outputs and workforce development needs required to enable a whole systems approach to urgent and emergency care to become real across the health economy where all interdependent partners would work together towards the same aim **(O9, O13, O 14)**.
- An integrated career competence framework for urgent and emergency care across the NHS Career Framework summarising the core competences required by any

practitioner to deliver person centred safe and effective care in any context mapped against existing competence frameworks for all professions (O10- O 5).

- An options appraisal with recommendations for workforce development involving Clinical Commissioning Groups, higher and further education, and provider organisations for new role development and workforce learning and development (O13-15).

In this case example, the evidence of impact might be demonstrated through:

- Regional report for commissioners, providers, universities on recommendations for future development of whole systems integrated services.
- Recommendations report for education commissioners to financially support new Physicians Associate programme and revised Advanced Practice curriculum.
- Competence framework for all professions working in integrated urgent and emergency care services.
- Curriculum documents for validation of new programmes to meet workforce needs.
- Workforce commissioning and workforce planning reports.
- New joint appointment roles focusing on development of effective workplace cultures that promote whole systems working.

Impact indicators that could be measured are shared purpose (2.1), shared values (2.2), creating an inclusive culture (2.3), commitment to lifelong learning (2.4), patient safety metrics (2.5), effective use of resources (2.6), compliance with national standards (2.7), whole systems working (2.8), systems of shared governance (2.9), good partner relations (2.10), creativity and innovation (2.11), public trust (2.12) and organisational awareness and intelligence (2.13). Given that it will have an impact on the workforce as a whole other impact indicators that could be evidenced include effective staffing levels (3.4), improved patient flow and discharge (3.6), integrated working (3.7), patient at the heart of decision making (3.8), systematic ways of capturing best practice (3.9), patient experience (3.10) and reviewing and improving standards (3.11).

5.1.3. Transformation of Knowledge Enabling Knowledge Translation

CPD supported by workplace contexts that both support and encourage engagement with and use of different types of knowledge in everyday practice and active sharing through CPD strategies that focus on: using and blending multiple knowledges¹² to inform professional decision-making; skills in facilitating dialogue, active enquiry and evaluation; and developing practical and theoretical knowledge fostering leadership, evaluation and culture, will achieve knowledge rich cultures recognised by knowledge use and development, active inquiry, innovation and creativity.

¹² Knowledges encompasses theoretical and practical knowledge, knowledge of the person being cared for/worked with, experience, expertise, artistry, creativity and local knowledge.

Case Story– Community of Practice for Health Visiting to meet Action on Health Visiting Targets

A CPD initiative to develop a Community of Practice for Health Visitors to address Action on Health Visiting government targets identifies the importance of enabling active learning opportunities for Health Visitors.

Health Education England, together with a local University and regional health visiting leaders, work together to develop a community of practice for health visiting and gain funding to run an action research initiative underpinned by the principles of practice development. The initiative focuses on developing 15 Health Visitors across the region as clinical leaders with expertise in practice development through 12 monthly active and action learning sets, as well as critical companionship to facilitate a person centred approach and the transition of evidence into practice across their localities for the benefit of improving public health outcomes for children and families (**M9, M12, M13**). One of the purposes of practice development is the development of an effective workplace culture that enables everyone to flourish, or more simply good places to work. Therefore, central to the initiative is enhancing the learning experience of student Health Visitors in practice placements, minimising student attrition through enhancing self-sufficiency of health visiting practitioners in the work place (**M9, M10, and M11**). A Master Class series established as part of the initiative enables Health Visitor teams to come together to share best practice and innovation in a vibrant and dynamic network (**M12, M13**).

The outcomes from the initiative include:

- 15 health visiting clinical leaders with expertise in facilitating the development of person centred cultures who can embed practice development, innovation and improved outcomes across their teams and localities (**O 17, O 19**).
- A dataset that can be used by Health Visitors to demonstrate effective person centred cultures, teams and student placements (**O16, O 17**).
- A master class series that brings together related stakeholders such as Health Visitor practitioners, students, practice teachers, managers and service users into a vibrant health visiting network (**O 16-19**).
- Video for YouTube to share the strategies that can be used to implement, embed and evaluate person centred and effective health visiting practice across localities (**O 16-19**).
- Narrated presentation for disseminating locally and nationally (**O 16-19**).
- A user friendly/easy to read summary of the project and its outcomes (**O 16, O 17**).

A reference group of key stakeholders including service users is established to provide critique and advice to the project team and participants throughout its duration. The CPD Impact Tool can be used as the guiding assessment tool to measure the impact of the programme at individual, team, service and organisational level in terms of development of workforce knowledge and skills and service improvement across the health economy.

In this case example, the evidence of impact can be demonstrated through:

- Self-assessment against leadership frameworks.
- Personal development plans.
- After action reviews.

- 15 step challenge report.
- Reflective portfolio.
- Paper for publication.

These methods of assessment and evaluation will enable health visitors to demonstrate the impact of their learning on self, their team and their service. Impact indicators that could be measured here are: shared vision for the service (3.1), creating person centred cultures (3.2), patient safety metrics (3.5), integrated working (3.7), patient at the heart of decision making (3.8), systematic ways of capturing best practice (3.9), patient experience (3.10) and reviewing and improving standards (3.11). Similarly, if evaluation of impact on the individual health visitor was important then impact indicators related to self-awareness (1.1), self-confidence (1.2) , role clarity (1.5), person centred practice (1.6), positive attitude to change (1.10), creative problem solving (1.17) and enhancing skills and competence (1.11) could also be measured and demonstrated as an example.

5.1.4. Transformation of Workplace Culture to Implement Workplace and Organisational Values and Purpose Relating to Person Centred, Safe and Effective Care

CPD that takes place within contexts where there are shared values and purposes, and organisational readiness that draws on CPD strategies that focus on: developing and implementing shared values; evaluating the experiences of service users and staff in relation to these values; and, developing skills in facilitating effective workplace cultures through leadership, will achieve improved service user and provider experiences, outcomes and impact, sustained person centred, safe and effective workplace cultures and team effectiveness, increased employee commitment, and organisational leadership and effectiveness.

Case Story: Developing Workplace Culture Transformational Leadership Skills

An NHS Trust has commissioned a large scale interconnected CPD whole systems leadership programme from link worker to medical consultant level across its organisation in order to deliver its Shared Purpose framework goals to evidence the delivery of person centred safe and effective care across its workforce. The framework outlines the vision and values of the organisation and provides clear guidance on the knowledge, skills, behaviours and competences required of all staff.

The Band 7 Clinical Leadership programme aims to develop the transformational leadership potential of practitioners using the workplace as the main resource for learning. It provides an opportunity for practitioners to enhance the effectiveness of their teams through identifying and implementing shared values, evaluating the experiences of service users and staff in relation to these values and growing a positive team learning culture.

A band 7 Clinical Scientist undertaking this programme will use the CPD Impact Tool to underpin the assessment of their leadership skills and awareness of their development needs at the start of the programme in triangulation with other leadership frameworks. The programme will provide opportunities to try out tools and methods for practice development and innovation that focus on moving from individual, to team, to service to organisational

impact and effectiveness. Aimed at facilitating learning, development inquiry and improvement in the workplace in real time, the programme will encourage the practitioner to critically reflect on their journey with their team and explore how they have implemented change within the workplace. They will be required to demonstrate how the impact indicators at individual, team and service levels within the CPD Impact Tool have been met throughout the process, and link these to their professional portfolio for assessment by programme facilitators. The local University is asked to provide opportunities for academic accreditation using the CPD Impact Tool as a benchmark against postgraduate Level 7 programmes of learning **(M16)**.

The Clinical Scientist works with her team to promote active learning around a number of key areas for development during the programme using the CPD Impact Tool as a benchmark to raise awareness of why learning is important within her team. Specifically these include:

- A claims, concerns and issues framework for creating stakeholder engagement in collaborative decision making and action planning **(M14, M15)**.
- 360 Degree feedback tool to promote clarity of areas for development within the team **(M15, M16, M17, M18)**.
- Values clarification to create a shared vision and role clarity within the team **(M14)**.
- Emotional touch point and patient story methodologies and methods to identify how to work with patient feedback in real time and promote collaborative team working **(M17, M18)**.
- An evaluation framework to enable the team to measure the impact of their activities and actions together **(M16, M17, M18)**.

This helps to promote a high degree of self and team awareness and role clarity and responsibility for delivery of the shared vision for improvement of services **(O21-24)**. At the end of the programme the Clinical Scientist, as part of the leadership programme, presents the highlights and impact of their work to the Chief Executive and NHS Board leaders and directors of service to demonstrate impact on service effectiveness and patient experiences, as well as value for money **(O 20, O24)**. The outcomes of the collective group experience are used to continue to form a whole systems organisational vision for leadership within the Trust which continues to be shaped from programme to programme **(O23)**. The Clinical Scientist is keen to gain a promotion at the end of the programme and uses her portfolio of evidence mapped to the CPD Impact Tool for her promotion interview **(O 6-8)**.

In this case example, the practitioner can demonstrate evidence of impact through:

- Self-assessment at start and end of programme against leadership frameworks.
- Personal development plan derived from reflection on 360 degree feedback.
- Evidence of action plans from observations of practice.
- Reflective essay on transformational journey.
- Professional portfolio.
- Evidence of team impact through organisational celebration conference.

Using these mechanisms of assessment will enable the practitioner to demonstrate impact at both individual and team level, to demonstrate increased self-awareness (1.1) and self-confidence (1.2), critical reflection (1.4), role clarity for self and team (1.5,4.1, 4.2), person centred practice (1.6, 4.3, 4.4, 4.5), using evidence systematically in practice (1.15, 4.13), to

make a positive impact on patient experience (1.16, 4.4, 4.5, 4.10, 4.12), role modelling leadership skills and encouraging these skills to be developed in her team (1.14, 4.12) and using creative problem solving skills to help the team to learn from patient feedback (1.17, 4.9, 4.10, 4.14).

Several other case stories have been developed and are provided in Appendix 4 and 5.

Summary of Discussion

The project has demonstrated the importance of using a system wide co-production approach to developing the CPD Impact Tool which fits with HEE's mandate for the Education Outcomes Framework. The Tool has the potential to act as a catalyst for driving quality improvement and outcome measurement throughout the NHS by encouraging a change in culture and behaviour, including a renewed sense of focus on addressing variation in standards and ensuring excellence and innovation in education provision.

In summary, in terms of its primary objectives the project has accomplished all four which were to:

- Develop a CPD Impact Tool that encompasses impact indicators.
- Identify and test impact indicators of effectiveness with an expert stakeholder critical reference group.
- Refine the Tool to ensure impact is captured at individual practitioner, and team level.
- Provide evidence of evaluative impact for measuring organisational effectiveness of CPD programmes on the health and social care workforce.

The project has identified the most meaningful measures that could be used to evidence impact at individual, team, service and organisational level, although we would advocate that further testing is required.

Individual and Team Impact Indicators

CPD indicators identified as being most useful for providing information on individual and team effectiveness relate to a combination that demonstrate the team is working effectively to deliver person centered safe and effective care in a knowledge rich and inclusive environment.

- Self-efficacy (self-awareness and self-confidence).
- Shared vision and values.
- Role clarity.
- Interdisciplinary team working.
- Collaborative decision-making.
- Peer learning and review.
- Skilled facilitation
- A sustained person centred safe and effective culture.

Service and Organisational Impact Indicators

The outcomes and associated indicators most useful for measuring service and organisational effectiveness were identified as:

- Shared vision and values for the service/organisation.
- A positive learning culture.
- Integrated team working.
- Patient at the heart of decision making.
- Patient experience.
- Systems of shared governance.
- Person centred, creative and innovative learning culture.
- Organisational awareness and intelligence.
- Systematic mechanisms for capturing best and poor practice.
- Patient safety metrics.
- Effective staffing levels.

A commitment to modelling whole systems integrated working is essential if organisational effectiveness is to be achieved, and requires the outcomes of the other 3 transformation theory domains to be evidenced. Organisations that display a culture which values research and innovation, and provide the practical support and the leadership to sustain this will be most able to demonstrate impact in all interdependent transformation domains.

The report will now conclude with a review of limitations, recommendations and conclusions.

6. Project Limitations

We have reflected on our methodological approach, to what has been a complex multidimensional piece of work, and believe that the realistic synthesis and evaluation approach has enabled both us and our stakeholders to reflect and focus on real world issues identifying the practical tools people can use in the workplace to lead transformation of selves, teams, services and quality of person centred safe and effective care. Our brief was to develop indicators of CPD impact and we believe you cannot do that without taking a theoretical approach identifying the mechanisms, context and outcomes of learning at multiple levels.

We believe this approach has demonstrated the importance of the integration of clinical expertise with patient and professional values, and the best research evidence into the decision making process for patient care. Clinical expertise for us means the clinicians cumulated experience, education and clinical skills. Our approach acknowledges the importance of evidence from practice, local data and experience. The resultant CPD Impact Tool needs to be tested across all disciplines more extensively taking a whole systems approach.

Whilst we were disappointed with the response rate to the national survey in Phase 1 of the project, we believe that this was overcome by strong stakeholder engagement in Phase 2 of the project from the various groups involved in testing the tool. In Phase 1 it was difficult to engage some stakeholder groups possibly due to the complexity of the work, and there is a

need to develop a clear strategy for translating the tool into a usable format for different audiences.

From the perspective of impact on service users, no mention was made of how indicators for capturing impact on service users can be determined in relation to continuity and consistency **(O9)**, except implicitly through compliance with national standards. At the staff/team level, no mention was made of how the impact on staff outcomes **(O10-011)** are determined, although inferred indicators of team effectiveness **(O12)** was slightly implied through assessment against shared purposes and shared values and inclusive culture and good partner relations. At the systems level outcomes 12-15 demonstrate an inherent implication through good partner relations and systems working.

CPD impact, therefore, on service users and teams in particular need to be given more attention, although through using some of the ways impact can be demonstrated.

The timeframe and funding available for the project has restricted the scope of the work, and we would have wanted to test and refine it further by working with a number of pilot sites across England.

7. Recommendations

The report provides recommendations for Health Education England and Policy makers, Commissioners of CPD, providers of CPD learning (HEIs) and facilitators of CPD.

7.1. Recommendations for Health Education England, Professional Regulators and Policy Makers

11. The CPD Impact Tool provides the mechanisms to demonstrate application and evaluation of the EOF domains using a whole systems integrated approach to measuring the impact of CPD learning on individuals, teams, services and organisations for health care professionals. It could form the basis of a national benchmark for CPD programmes across the country to demonstrate whole systems integrated learning, development, improvement, inquiry and innovation.
12. The Tool has the potential to provide an evidence based self-assessment framework for professional revalidation for registration as well as being transportable from one institution or organisational to another (educational passport).

7.2. Recommendations for Commissioners of CPD

13. The report recommends that more emphasis should be placed on the importance of learning in the workplace which is at the heart of providing person centred safe and effective integrated services and care for the public. In order to deliver this vision that integrates learning with development, improvement, innovation and inquiry in the workplace there is a need for facilitation skills that embraces all of these areas and mechanisms for accrediting individuals and workplace programmes. We believe that more emphasis should be placed on commissioning of workplace programmes of

learning to keep pace with rapidly changing practice needs and contexts. This approach would overcome the traditional theory-practice gap. The Tool also has the potential to guide commissioning and tendering documents where providing benchmark measurements may be difficult. For example the number of people who can demonstrate role clarity, or number of people who have achieved promotion.

7.3. Recommendations for Providers of CPD Learning

14. The Council of Deans for Health could support a national pilot of the Tool to offer opportunity for further testing and refinement. Working with a number of pilot implementation sites in England it could be used by HEIs in order to measure the impact of the outcomes and indicator measurements on CPD learners.
15. The CPD Impact Tool could provide a valuable benchmark tool for designing curriculum for professional programmes leading to registration or specialist qualifications and be used to design teaching, learning and assessment and impact evaluation strategies.
16. Further development of the impact indicators for knowledge translation is needed and we would recommend this provides opportunity for HEIs to work in partnership with CPD facilitators and workforce planners to achieve this.

7.4. Recommendations for Health Service Providers

17. The impact indicators could be used by organisations to develop a quality dashboard linked to improvements in patient experience and outcomes, which would provide an integrated whole systems approach to workforce planning, and learning and development for all professions. In turn the dashboard has the potential to generate impact reports for individuals, teams, services and organisations.
18. The individual impact indicators are relevant to all health disciplines and may be useful for annual appraisal, personal development review and career progression planning as well as thinking about how CPD learning can improve practice. They provide a mechanism by which professional competence may be demonstrated.

7.5. Recommendations for Facilitators of CPD Learning in the Workplace

19. The tool provides an opportunity to guide facilitators' ongoing development of their learning and development skills broadening these across all areas that reflect key health and social care purposes.
20. In our programmes of research associated with workforce transformation we feel it is important to consider implications for commissioning joint appointments for CPD workplace facilitators between clinical or health care settings and HEIs. This model would strengthen active learning from the workplace.

8. Conclusions

In conclusion, the study has achieved its aims and objectives managing an extremely complex piece of synthesis and evaluation in a relatively short time frame. The study aimed to devise and test a CPD Impact Tool that incorporated mechanisms for measuring the impact of CPD learning on individual, team and organisational effectiveness in relation to improvements in quality of care and patient outcomes in the workplace. The work has been endorsed by a group of international research and academic experts widely published in and respected for their work in this field. We have addressed the three research questions which were mapped to the EOF Domains at the start of the project.

Research Questions:

1. Which indicators are useful for providing information on individual and team effectiveness in relation to improvement in quality of care and patient experience in the workplace? (EOF Domain 1, 2, 3, 5).
2. How can these impact indicators be synthesized to develop a framework to measure individual and team effectiveness in the workplace? (EOF Domain 1, 2, 3, 5)
3. What are the indicators of organisational effectiveness appropriate to include in a CPD impact framework? (EOF Domain 1-5)

The resultant CPD Impact Tool provides a whole systems integrative, interdependent and interrelated synthesis of CPD enablers, mechanisms, contexts and outcomes underpinned by a strong theoretical foundation. The impact indicators identified will enable different stakeholder groups to demonstrate the impact of CPD learning in different contexts and link teaching, learning and assessment strategies more clearly with impact. We hope that the project commissioners support its potential to be adopted as a national tool to underpin the HEE Education Outcomes Framework.

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10. Appendices

Appendix 1: Advantages and Limitations of the Different Approaches to Gathering Data

Potential pros and cons if measuring changes in patient experience over time Approach	Main advantages	Main limitations
In-depth interviews	<p>In-depth information</p> <p>Can probe reasons</p> <p>Can handle sensitive topics</p>	<p>Resource intensive</p> <p>May have difficulty interviewing same people over time</p> <p>Generalisability issues with small samples</p>
Focus groups and panels	<p>In-depth information</p> <p>Can reconvene same group over time</p> <p>Group dynamic can spark ideas</p>	<p>Generalisability issues/selection bias</p> <p>Resource intensive</p> <p>May experience high rates of drop out over time</p>
Narrative stories	<p>In-depth information</p> <p>Puts 'human face' on issues</p> <p>Focuses on what is most important to patients and carers</p>	<p>Generalisability issues</p> <p>Can be difficult to draw out key themes</p> <p>Difficult to track changes in the same group of people over time</p>
Complaints and compliments	<p>Can signal areas in need of improvement</p> <p>Can identify things that people feel particularly passionate about</p>	<p>Biased towards the most serious (or most positive) aspects of care</p> <p>May not have large numbers to work from</p> <p>May focus upon individualised issues</p>
Photovoice	<p>Gains unprompted feedback about issues that matter most to participants</p> <p>Helps to engage disadvantaged and hard to reach groups</p> <p>Visual medium so may be more engaging</p>	<p>Participants need to be trained in the approach and in writing captions</p> <p>Requires technology (cameras)</p> <p>May be difficult to draw out trends because the 'output' is in a novel format</p>

Appendix 2: Indicators of Effectiveness of CPD in Social Care

	Individual/ team effectiveness	Organisation	Service users from practitioners' perspective
1	More confident and a clearer understanding of legislation and their professional roles	Commitment to the empowering staff/ breaking hierarchical barriers	Developing new ideas about care pathways for specific groups
2	Increased knowledge base and better practice skills (using theory & evidence in practice)	Adapting anti discriminatory practice	Revisiting assessment procedures to better understand service user views
3	Having a renewed interest in their work.	Linking award achievement to professional progression	Increased awareness of the rights of service users and the duties and responsibilities of the practitioners/ departments to them.
4	Time and opportunity to reflect on practice-encouraging analytical thinking in practice	Operating a negotiated infrastructure to provide the necessary support and assessment systems (Participation in training at all levels)	
5	Increased sense of authority in the advocate role	Increased confidence in setting & monitoring standards of practice	
6	New work opportunities and promotion	Increased numbers of skilled workers and hence better services to clients	Views from service users
7	More positive about further training	Improved interdisciplinary working	
8	More effective communication	Greater support for training staff	Improved health and well being
9	More confident at using user led rather than prescribed services		Felt treated with respect and better understood
10	Transition from student to practitioner		Empowered and not judged
11	Better support in mentoring students		Felt that their needs were met
12	Organisational commitment		Practitioners/ students were more sensitive to cultural/ religious needs
13			Felt positive towards the practitioners/ students as individuals

Appendix 3: Education Outcome Analysis Framework

Purpose of analysis:

To identify potential indicators of individual, team, service or organisational effectiveness from workplace portfolios and assignments that can provide feedback on the impact of continuous professional development (CPD)

Process:

- Read evidence provided, and analyse independently using template provided
- Discuss and agree as a pair/group potential criteria that could be measured (e.g confidence) or indicator (actual measure)

Definitions:

"**Indicators** are succinct measures that aim to describe as much about a system as possible in as few points as possible".

"**Indicators** help us understand a system, compare it and improve it". **Source: NHS Institute for Innovation and Improvement (n.d.) The good indicators guide. Coventry: NHS Institute p.5 [You will need to register and log-in on the NHS Institute website to access].**

"To be useful, **indicators** must be measurable with available data at reasonable cost. There must be evidence that the quality or quantity of nursing substantially contributes to changes measured by the indicator. The indicator must be recognised as important (by the public, managers and nurses) and nursing's contribution must be recognised (by nurses and others)". (RCN, accessed 12th July 2014)

"**Indicators** serve to foster understanding of a system and how it can be improved, and to monitor performance against agreed standards or benchmarks. Crucially, indicators provide a mechanism by which care providers can be accountable for the quality of their nursing services". **Source: Griffiths, P. et al (2008) State of the art metrics for nursing: a rapid appraisal(PDF 357KB). London: National Nursing Research Unit, King's College London p.1,2.**

Clinical quality indicators are described as "**Evidenced based indicators** that support the measurement of the quality, safety and reliability of care. The CQIs focus on quality improvement rather than a measure of performance. They are currently process indicators which measure aspects of nursing care such as assessment and interventions".

Source: Leading Better Care: Clinical Quality Indicators (CQIs) para 1. Information about this initiative in Scotland is made available as part of the NHS Education for Scotland Evidence into practice website.

Reviewer Name:

Evidence no	Type Of Evidence	Individual Indicator	Team Indicator	Service Indicator	Organisational Indicator	Notes

Appendix 4: Case Story: Developing Ambulatory Services- a Collaborative Workplace Programme Approach to Assistant Practitioner Workforce Development

A new Foundation Degree in Ambulatory Care has been validated because a large Acute Trust has identified the need to develop the ambulatory services workforce in order to provide better services to the public in their local community **(M5, M6, and M7)**. The workforce plan identifies the need to increase the number of band 4 workers using the workplace as a focal point for learning **(M6)**.

The CPD Impact Tool MCOs can be used to design workplace learning activities at individual, team, service and organisational level **(M7, M8)**. An evaluation strategy to measure the impact of the new roles on service delivery and patient experience are designed at the same time to be embedded in the programme so that evaluation is longitudinal and measured in real time using the CPD Impact Tool indicators of effectiveness **(M8)**.

At the beginning of the programme the learner Assistant Practitioner (AP) can use the CPD Impact Tool to construct their workplace development action plan with their mentor, tying learning activities and opportunities to anticipated outcomes in practice. The AP is encouraged to work in a tripartite relationship with their workplace mentor and university workplace learning facilitator to critically reflect upon their learning experiences in the workplace and consider impact on self, team, and patients/service users. Evidence gathered will provide material for the individual practitioner's portfolio and university assignments.

The workplace mentor can develop awareness of the importance of foundation degree study for developing the workforce and understanding the importance of developing a positive workplace learning environment for the AP. The mentor is able as a result to positively promote the role to the wider team and get the whole team involved in maximising learning opportunities and enabling them to understand the benefits for patient care. At team level this will create role clarity, role acceptance and collaborative peer support because learning activities are designed to involve the team in reflective activities. Opportunities to develop insight into the benefits of the AP role to patient care are also enhanced because the AP has to present their learning to the local Health Watch group as one of the learning activities.

The outcomes of this initiative are:

- From a university perspective, opportunity to work in strong partnership with practice colleagues and service users in planning, validating, delivering and evaluating the impact of the Foundation Degree on emergent new roles will be enhanced. The CPD impact tool provides clarity for the programme validation panel in relation to the key outcome criteria that the programme will be judged against in terms of benefits to individuals, teams and service **(O9-11, O14, O15)**.
- For commissioners and workforce planners, the tool provides the opportunity to evaluate the impact of workplace learning foundation degrees on individuals and teams and to explore the benefits for the service as a whole in relation to patient satisfaction, time to care, and CQUIN targets **(O9, O13-15)**.

- Development of a career competence framework for APs working in ambulatory services across the patient pathway, which promotes improved understanding across the health economy of the roles and responsibilities of APs as a member of the interdisciplinary team **(O10-O12)**.
- Improved public understanding of the role and contribution of the AP to delivering person centred safe and effective care to meet their needs **(O9)**.

In this case example, the evidence of impact can be demonstrated through:

- Programme validation document integrating the benchmark review of the programme against the CPD Impact Tool MCOs and Impact Indicators.
- Workforce commissioners report of programme impact on numbers of new posts and value for money related to local economy.
- Provider report on impact of role across workforce in relation to workforce numbers and skill mix, patient flow, patient experience and safety metrics.
- Workplace mentor evaluation report.
- Competence assessment.
- AP reflective portfolio.

This case example demonstrates the potential to measure the impact of a CPD initiative at organisational, service, team and individual levels. For the purpose of demonstrating the theory in action impact indicators that could be measured in relation to skills development are shared purpose (2.1), shared values (2.2), creating an inclusive culture (2.3), commitment to lifelong learning (2.4), patient safety metrics (2.5), effective use of resources (2.6), compliance with national standards (2.7), whole systems working (2.8), systems of shared governance (2.9) and organisational awareness and intelligence (2.13).

Appendix 5 Case Story- Developing Integration Champions in Health and Social Care

A CPD initiative aims to develop the research skills of service users as integration champions as part of national priorities for greater patient involvement in research to shape future health and social care service design and improvement across the health economy.

A series of regional workshops involving a wide range of stakeholders from commissioning, service and provider backgrounds as well as user groups is drawn together and the facilitators use the CPD Impact Tool as a benchmark by which to plan the phases of strategy development targeting:

- Individual service user involvement in research through research training workshops **(M9)** helping people reflect on the knowledge and skills they use in their everyday practice to explore questions or issues that concern them **(M11)**.
- Health Watch teams' capacity to influence the questions generated to improve services with the patient at the heart of the improvement **(M10, M11, M12)**.
- NHS Organisations' capacity to measure the impact of integrated service improvements on patient experience and quality of care overall **(M13)**.
- County Councils' ability to meet the training requirements of private, voluntary and independent sector providers **(M9-M13)**.

The value of the CPD Impact tool for this case story would be to enable the integration champions to address the need for improved public patient involvement in research and improvement in health and social care providers focusing on the transformation of knowledge and skills to meet society's needs.

A key priority identified by the group is to improve the care of people with back pain in a local community. A series of workshops is arranged for service users to work with practice teams to identify small-scale quality improvement projects **(O16-19)**. This enables practitioners and service users to learn together to understand each other's experiences and to co-develop new models of care **(O16, 17, 18)**. Semi-structured interviews with the service users help to identify the factors which helped them to be effective **(O18)**. These include: • clarity about their role and expectations of their involvement, particularly during recruitment • preparation for involvement – making time for team discussion early on • ongoing support • good communication • opportunities for influencing change **(O18, 19)**. The findings help to develop a model for co-learning that may be useful for other projects in the future.

In this case example, the evidence of impact can be demonstrated through:

- A pre-test post-test workshop training survey to measure the impact of learning on each participant.
- Audit report from Health Watch about the impact of the programme on whether numbers of public are being able to affect change in practice.
- Findings of the small scale improvement projects about impact on practice.
- Interview findings from service users.
- Training evaluation report from training providers.

These methods of assessment and evaluation will enable integration champions and commissioners to demonstrate impact at both individual and regional level, and to

demonstrate how the blending and melding of different types of knowledge have been used to facilitate active enquiry and evaluation, innovation and creativity and greater inclusion of the public in decisions about services that directly impact on their health and well-being. Impact indicators that could be measured here are: shared vision for the service (3.1), creating person centred cultures (3.2), integrated working (3.7), patient at the heart of decision making (3.8), systematic ways of capturing best practice (3.9), patient experience (3.10) and reviewing and improving standards (3.11). Similarly if evaluation of impact on the individual service user was important then impact indicators related to self-awareness (1.1), self-confidence (1.2), role clarity (1.5), positive attitude to change (1.10), creative problem solving (1.17) and enhancing skills and competence (1.11) could also be measured and demonstrated.

Appendix 6: Integration of Transformation Theories, Action Hypotheses, MCOs and Link with Impact Indicators to Demonstrate Effective CPD and its Outcome (Shaded Column) V4

Summary

All transformation theories are interrelated

Transformation theory 1 (individual) & 4 (context) are required to enable Transformation theories 2 & 3

Therefore immediate workplace, organisational and societal contexts are the contexts within which transformation of individuals, knowledge and services takes place

Need definitions for: Workplace learning work based learning and work related learning 'service'

Transformation

Suggest we use knowledge translation rather than knowledge mobilisation

Check included in the literature:

Motivation for learning synthesized with literature

Check the taxonomy for cognitive and skills and affective domains in the literature

Theory	Hypothesis	Mechanism	Context	Outcomes	Impact Indicators
Transformation of individual's professional practice	CPD that is work based, driven by the learner, provides facilitated support and reflection and includes 360 degree feedback will increase self-confidence, self-awareness, role clarity, and create a positive attitude to change and opportunities for career development	M1 Facilitated support and reflection M2 Developing skill in reflection and self-awareness M3 360 degree feedback M4 Learning that is self-driven	C1 Opportunities for CPD that are work based Other suggested C's: <ul style="list-style-type: none"> • Ever changing social needs • Enabling organisations that value work based learning & development • Culture of inquiry, leaning, application and implementation 	Of Individual Transformation O1 Increase self-awareness O2 Increase self-confidence O3 Role clarity & opportunities for role innovation and development O4 Career development & progression O5 Positive attitude to change	Individual Indicators of effectiveness 1.1. Self awareness 1.2. Self confidence 1.3. Emotional intelligence 1.4. Critical Reflection 1.5. Role Clarity 1.6. Person centred practice 1.7. Compassion 1.8. Active Lifelong learning 1.9. Career progression & personal growth 1.10. Positive attitude to change

Theory	Hypothesis	Mechanism	Context	Outcomes	Impact Indicators
				<p>Other suggested outcomes:</p> <ul style="list-style-type: none"> • Self-efficacy- (beliefs determine how people feel, think, motivate themselves and behave) • Motivation • Transformational learning • Self-sufficiency and self-directing • Continuing motivation to learn • Empowerment • Increased responsibility • Increased flexibility & adaptability • Meaningful positive engagement with change • Increased knowledge • Leads knowledge translation • Empathy for difference and diversity • Person centred safe & compassionate practice • Feeling valued as 	<p>1.11.Skilled & competent 1.12.Active listening/ communication 1.13.Speaking up for human rights 1.14.Role Model 1.15.Using evidence systematically 1.16.Positive impact on patient experience 1.17.Creative problem solving</p>

Theory	Hypothesis	Mechanism	Context	Outcomes	Impact Indicators
				<p>an individual</p> <ul style="list-style-type: none"> Transformation of self/individual <p>Context outcomes:</p> <ul style="list-style-type: none"> Compassionate care experienced by service users Increased employee commitment to work and learning 	
<p>Transformation of skills to meet service provision for society's needs</p> <p>Transformation of skills to identify and meet society's changing needs and maintain social justice</p>	<p>CPD that focuses on self-assessment expanding skills to meet a changing service will be reflected in outcomes around better integration and continuity of service provision, greater employability and opportunities for career progression</p>	<p>M5 self-assessment (? move to H1)</p> <p>M6 Identifying service needs/gaps</p> <p>M7 Expanding skills and competences through a range of different ways</p> <p>Other suggestions:</p> <ul style="list-style-type: none"> Growing the team Increasing/improving team effectiveness Active inquiry and evaluation of own and collective practice and learning 	<p>C3 The need for staff in contemporary healthcare to be adaptable and flexible responding to ever changing social needs</p> <p>C4 Value for money in the use of human resources and investment</p> <p>C5 A focus on team competences rather than the individual</p>	<p>O10 Better integration of services (?applies to team transformation better)</p> <p>O11 Continuity of services experienced by users/Service consistency (?applies to team transformation better)</p> <p>O12 Improved employability/sustained employability</p> <p>O13 Career progression/substitution</p> <p>Other suggested outcomes:</p> <ul style="list-style-type: none"> Better partnerships with services and each other Value for money/economic 	<p>Service & Organisational Indicators</p> <p>2.1.Shared purpose framework</p> <p>2.2.Shared values</p> <p>2.3.Inclusive culture</p> <p>2.4. Commitment to LLL</p> <p>2.5.Quality metrics</p> <p>2.6.Effective use of Resources</p> <p>2.7.Compliance with national standards</p> <p>2.8. Whole systems working</p> <p>2.9.Systems for shared governance</p> <p>2.10. Good partner relations</p> <p>2.11.Creativity & innovation</p> <p>2.12.PPI and public trust</p> <p>2.13.Organisational awareness & intelligence</p>

Theory	Hypothesis	Mechanism	Context	Outcomes	Impact Indicators
				austerity <ul style="list-style-type: none"> Better services experienced by service users An effective cohesive team Better communication More authenticity in individuals and teams rather than a tick box Positive change in practice and learning 	
Transformation of knowledge/knowledge translation	CPD that focuses on using multiple knowledges providing up to date knowledge about, safe, effective, & person centred practice will achieve knowledge translation if participants are supported to develop their skills in facilitating others' learning and blending different knowledges; leadership and workplace contexts and cultures Expand on aesthetics, artistry, creativity	M8 Helping people to judge the quality of the knowledge they use in practice M9 Blending and melding different types of knowledge to guide practice M10 Facilitating dialogue/discussion about how to use knowledge in (front line-remove) practice M11 Developing practical and theoretical knowledge of (clinical -remove) leadership	C2 Engaging with and using different types of knowledge in everyday practice Actively promote sharing of knowledge in the workplace	O6 Knowledge used and developed in practice O7 Knowledge-rich culture O8 Evidence implementation/innovation O9 Facilitates active contribution to practice development/inquiry Creativity,	Service Indicators 3.1.Shared vision & purpose for service 3.2.Person Centred culture 3..4.Effective levels of staffing 3.5. Patient safety metrics 3.6.Improved patient flow & discharge 3.7.Integrated working 3.8.Patient at heart of decision making 3.9.Systematic mechanism for capturing best and poor practice 3.10. Patient experience 3.11.Reviewing & improving standards/Clinical Audit
Transformation	CPD that focuses on	M12 Developing shared	C5 Working with shared	O14 Increased	Team& Organisational

Theory	Hypothesis	Mechanism	Context	Outcomes	Impact Indicators
<p>of work place (teams/-remove) context to deliver on organisational values</p> <p>Transformation of workplace context as Individual personal growth and development through sound interactive relationships</p>	<p>living shared organisational values across different boundaries will increase team effectiveness and organisational effectiveness that makes a positive difference to the experience of service users</p>	<p>values</p> <p>M13 Implementing shared values (? demonstrating shared values)</p> <p>M14 Evaluating experiences of shared values</p> <p>Other suggestions:</p> <ul style="list-style-type: none"> Peer support Team working Reflection, challenge and facilitation 	<p>values in healthcare</p> <p>Other suggestions:</p> <ul style="list-style-type: none"> Organisational readiness to change Contexts work towards a shared purpose that delivers values 	<p>employee commitment to work and learning (different levels individual and team)</p> <p>O15 Increased team effectiveness (?move to H2)</p> <p>O16 Improved user and provider experiences, outcome and impact</p> <p>O17 increased organisational effectiveness</p> <p>Suggested others:</p> <ul style="list-style-type: none"> Increased collaboration and partnership(incl external) Person centred culture underpinned by social justice Team working Organisational leadership and human behaviours Creativity , innovation 	<p>Indicators</p> <p>4.1.Role clarity & responsibility</p> <p>4.2.Shared vision & values</p> <p>4.3. Interdisciplinary team working</p> <p>4.4.Person centred team culture</p> <p>4.5.Collaborative decision making</p> <p>4.6.Effective team communication</p> <p>4.7.Positive learning culture</p> <p>4.8.High challenge & support</p> <p>4.9.Innovation & creativity</p> <p>4.10.Peer learning & review</p> <p>4.11.Commitment to lifelong learning</p> <p>4.12.Skilled facilitation of others</p> <p>4.13.Systematic use of evidence to inform practice</p>

Appendix 7: Ethical Compliance letter



23 December 2013

Ref: 13/H&SC/CL67

Ms Carolyn Jackson
Director, England Centre for Practice Development
Faculty of Health and Social Care

Dear Carrie

Confirmation of compliance for your study "*Health Education England Education Outcomes Framework- Development an impact tool to measure the contribution of Continuing Professional Development (CPD) to quality improvements in patient care and patient experience.*"

I have received an Ethics Review Checklist for proportionate review of the above project to be carried out in collaboration with Professor Jan Dewing and Professor Kim Manley. Because you have answered "No" to all of the questions in Section B, and have submitted appropriate supporting documentation, no further ethical review will be required under the terms of this University's Research Ethics and Governance Procedures.

In confirming compliance for your study, I must remind you that it is your responsibility to follow, as appropriate, the policies and procedures set out in the *Research Governance Handbook* (<http://www.canterbury.ac.uk/Research/GovernanceandEthics/GovernanceAndEthics.aspx>) and any relevant academic or professional guidelines. This includes providing, if appropriate, information sheets and consent forms, and ensuring confidentiality in the storage and use of data. Any significant change in the question, design or conduct of the study over its course should be notified to the Research Office, and may require a new application for ethics approval. [You are also required to inform me once your research has been completed.](#)

Wishing you every success with your research.

Yours sincerely

A handwritten signature in black ink that reads "Roger Bone".

Roger Bone
Research Governance Manager
Tel: +44 (0)1227 782940 ext 3272 (enter at prompt)
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cc: Professor Jan Dewing, Professor Kim Manley.

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