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# **Experience-based Co-design and healthcare improvement: realising participatory design in the public sector**

## **ABSTRACT**

Over the last decade, growing attention has been paid to the potential value of design theory and practice in improving public services. Experience-based Co-design (EBCD) is a participatory research approach that draws upon design tools and ways of thinking in order to bring healthcare staff and patients together to improve the quality of care. The co-design process that is integral to EBCD is powerful but also challenging, as it requires both staff and patients to renegotiate their roles and expectations as part of a reconfiguration of the relationships of power between citizens and public services. In this paper, we reflect upon the implementation and adaptation of EBCD in a variety of projects and on the challenges of co-design work within healthcare settings. Our discussion aims to contribute to the growing field of service design and to encourage further research into how co-design processes shape - and are shaped by - the power relations that characterize contemporary public services.

**KEYWORDS:** Experience-based Co-design, healthcare organizations, participatory design.

## **INTRODUCTION**

Applying service design theory and practice in the public sector is an emerging and rapidly growing field. The Design Commission (2013) recently argued strongly in favour of more design input in the shaping of public services. In the healthcare sector - the focus of this paper - the former National Health Service Institute for Innovation & Improvement (NHS I<sup>2</sup>) has since 2005 drawn on design theory, tools and techniques to develop a suite of interventions to help NHS organizations improve the quality of the services they provide (Carr et al., 2009). Whilst attempts at mapping these and other design-led approaches to service transformation are now under way (see the Service Design Research UK network funded by the Arts & Humanities Research Council: <http://www.servicedesignresearch.com/uk/>), rigorous research into the implementation and impact of service design in the healthcare sector remains fragmented and limited in several important respects. With this discussion paper we aim to contribute to a deeper understanding of design-informed approaches to healthcare quality improvement by reflecting on our own knowledge of, and experiences with, one such approach: Experience-Based Co-design (EBCD). We reflect here on a ten-year period that has seen the development, widespread adoption and implementation of EBCD. In doing so, we draw upon peer reviewed publications and 'grey' literature reporting on EBCD projects, and findings from a recent study we carried out to map existing and forthcoming experiences with this particular approach (Donetto et al., 2014, see Box 1). Our reflections seek to explore in particular: (a) the main issues shaping the impact to date of this particular form of participatory design in the healthcare sector and (b) any useful lessons for implementing this and similar co-design approaches in the future. With this paper, we aim to make a valuable contribution to the study of participatory design as applied to healthcare quality improvement and to foster fruitful exchanges with the design sciences.

## **EXPERIENCE-BASED CO-DESIGN (EBCD)**

EBCD is an approach to improving healthcare services that combines participatory design and user experience design to bring about quality improvements in healthcare organizations. It originated in 2005/06 as a participatory action research approach that explicitly drew on design theory (Bate and Robert, 2007a) and was first piloted in a head & neck cancer service at Luton & Dunstable hospital (Bate and Robert, 2007b). Our recent international survey of completed, ongoing, and planned EBCD implementations in healthcare services, exploring the features and adaptations of EBCD in the period between 2005 and 2013, found that at least 59 EBCD projects have been implemented following the pilot project in 2005/06, with at least a further 27 projects in the planning stage (Donetto et al., 2014; see Box 1). These projects span a broad range of clinical areas (including, but not limited to, emergency medicine, drug & alcohol services, cancer services, paediatric diabetes care and mental health care), not only in the UK but also Canada, the Netherlands, Sweden,

Australia, and New Zealand. The number of projects appears to be growing year on year and most of the completed or ongoing projects involve some, more or less structured, form of evaluation. However, with a small number of notable exceptions (Iedema et al., 2010, Tsianakas et al., 2012, Piper et al., 2012, Bowen et al., 2013), robust studies of EBCD projects remain scarce.

Our ‘mapping’ study included an international online survey of researchers and practitioners known to have had experience of implementing - or plans to carry out - an EBCD project, and a set of 18 follow-up telephone interviews with a sample of the 57 survey respondents. Survey: Potential participants received an invitation email containing more detailed information and three email reminders. Survey questions (1 to 36 questions, depending on participants’ answers) explored the following main areas: (a) details of the EBCD project participants had been or were planning to be involved in (e.g. duration, cost, team composition, stages of the methodology employed; adaptation of the methodology; training required); (b) participants’ views on the EBCD approach; (c) formal evaluation of the EBCD projects; (d) awareness and use of the online King’s Fund EBCD Toolkit; (e) plans for future implementation of the methodology. Recruitment took place between April and June 2013. In total, 57 participants took part in the survey. Interviews: Of those respondents who had indicated that they would be willing to be contacted for further discussion, twenty were purposefully selected (only completed projects, sample to cover a range of services/clinical areas and projects carried out both in the UK and abroad). Recruitment took place in August-September 2013. The follow-up telephone interviews were semi-structured and explored specific aspects of participants’ projects, such as reasons for choosing the EBCD approach, ways of gathering patient and staff experiences, reflections on the co-design process, approaches to securing staff engagement, the costs of the project and adaptations made to the EBCD approach. Eighteen interviews were carried out. Ethics review: Consent was obtained from all participants; ethical approval for the study was granted by King’s College London Nursing Midwifery & Psychiatry Research Ethics Subcommittee (Ref No. PNM/12/13-113). Analysis: Survey data was analysed descriptively through the SurveyMonkey™ engine and examined closely for content and themes. All interviews were transcribed verbatim. The interview transcripts were analysed thematically to address questions and points for further exploration that had emerged from the survey responses. (For further details about study methods, see Donetto et al., 2014)

**Box 1 – EBCD ‘mapping’ study methods (adapted from Donetto et al., 2014)**

Through a ‘co-design’ process EBCD entails staff, patients and carers reflecting on their experiences of a service, working together to identify improvement priorities, devising and

implementing changes, and then jointly reflecting on their achievements. The EBCD cycle - which typically takes 9 to 12 months - is divided into six stages (Figure 1): (1) setting up the project; (2) gathering staff experiences through observational fieldwork and in-depth interviews; (3) gathering patient and carer experiences through observation and 12-15 filmed narrative-based interviews; (4) bringing staff, patients and carers together in a first co-design event to share - prompted by an edited 20-30 minute 'trigger' film of patient narratives - their experiences of a service and identify priorities for change; (5) sustained co-design work in small groups formed around those priorities (typically 4-6); and (6) a celebration and review event (Bate and Robert, 2007a, Robert, 2013).

Originally called 'Experience Based Design' (EBD) the later switch of title to EBCD was a direct response to observing how early projects - which did typically include extensive work to understand patient experience (much of it innovative at the time) - were paying insufficient attention to the co-design phase; staff were instead relying on traditional, narrower approaches to making improvements to services without directly involving patients. As Bowen et al. (2013) recently reflected, these early EBD projects were 'initiated and led by local managers of particular services' which gave 'rise to particular configurations of power both in relation to the performance of co-design and in the implementation of changes (p.14).' The question therefore arises for designers who lead, support, or advise on co-design implementations in healthcare organisations of how to position themselves within the power networks that characterize these exercises. We shall return to the issue of power in co-design work later in this paper.

[Insert Figure 1 here]

Subsequent developments of EBCD have included testing an 'accelerated' version of the approach (Accelerated Experience-based Co-design – AEBCD) with the aim of addressing issues of time and costs involved in producing filmed narratives for the trigger film (which had previously drawn some criticism from staff leading projects). This 'accelerated' version - which relies on the extensive archives of filmed interviews focusing on people's experiences of their health-related conditions held by healthtalkonline (<http://www.healthtalkonline.org/>) - has recently been tested and evaluated in two Intensive Care Units and two lung cancer services through funding from the National Institute for Health Research (Locock et al., 2014). The accelerated approach proved readily acceptable to staff and patients and using films of national rather than local narratives did not adversely affect local NHS staff engagement (and may in some cases have made the process less threatening or challenging). The 48 co-design activities resulting from AEBCD implementation across four services were similar in nature to those in two previous EBCD projects (in lung and breast cancer services) against which they were compared, but were achieved more quickly and at lower cost. In Box 2, below, we report findings by Locock's team (Locock et al.,

2014) to exemplify the types of service changes reported in the EBCD and AEBCD pathways and how they compare.

There were 28 activities across the two EBCD pathways compared to 48 across the four AEBCD examples and a similar distribution of activities, with more small scale changes and process redesign within teams than wider process redesign between services and between organizations. In the EBCD pathways there were: 12 *small scale* changes (e.g. reviewing and improving patient information; regular updates on waiting times in clinic); 12 *process redesign within teams* (e.g. designated phlebotomist to reduce waiting time for blood tests); 2 *process redesign between services* (e.g. physiotherapists reviewed timing to give patients advice about exercise; information flow from pre-assessment to post-surgery redesigned); and 2 *process redesign between organizations* (e.g. link nurse scheme to improve cross-site working and visibility of test results). In AEBCD there were: 21 *small scale changes* (e.g. sourcing clocks to aid patient orientation in ICU; more comfortable v-shaped pillows for post-op patients); 21 *process redesign within teams* (e.g. new private room identified for receiving support after diagnosis; introducing mini ‘Schwartz rounds’); 5 *process redesign between services* activities (e.g. changed process for porters to remove waste avoiding ICU rest times; redesigned discharge summary with input from all professions); and 1 *process redesign between organizations* (improved cross-site information booklet for patients transferring to another hospital for surgery)

Box 2 Examples of changes resulting from co-design : service changes resulting from EBCD and AEBCD implementations (Locock et al., 2014, p.44)

## **SERVICE DESIGN, CO-DESIGN AND EBCD**

Design principles permeate EBCD. The approach is based on the foregrounding of experience, which is central to user-centred processes in other fields of application (e.g. from product design to human-computer interaction design) and it makes use of concepts and practical tools - such as touchpoints and emotional mapping - that have long been applied in design (Gage and Kolari, 2002). The focus on patients’ and staff’s experience rests on the fundamental premise that successful quality improvement in healthcare must attend simultaneously to all three dimensions of ‘good design’ (Berkun, 2004): performance, engineering, and aesthetics, where aesthetics (to which the analysis of experience contributes the most) is not the ‘soft’ element of the triad but rather encompasses fundamental aspects of a product or service such as utility, usability, and interactivity (Bate and Robert, 2007a). Furthermore, design-based and social science perspectives on how to enable in-depth understanding of the meanings and meaning-making practices of individuals and

social groups have common origins; combining these can bring theoretical insight to a change intervention aimed at addressing very practical concerns (Bate and Robert, 2007b).

Alongside the focus on experience, the other central thread underpinning EBCD is the participatory approach to the co-design processes that aim to bring about quality improvements. Participatory design gives primacy 'to human action and people's rights to participating in the shaping of the worlds in which they act', where participation refers to 'the fundamental transcendence of the users' role from being merely informants to being legitimate and acknowledged participants in the design process' (Robertson and Simonsen, 2013, pp. 4-5). Participatory design approaches are seen as a way for public services to respond to the increasing pressure from contemporary societal challenges and to address disengagement and disillusionment from citizens about politics, democracy, and social justice (Bradwell and Marr, 2008, Iedema et al., 2010, Lenihan and Briggs, 2011). However, as well as important benefits, co-design as advocated in EBCD presents both conceptual and practical challenges. Below we provide a brief overview of co-design in the context of EBCD before presenting what we know about how it has been applied in EBCD projects to date; finally we reflect upon the potential challenges that the reconfiguration of power relations which co-design aims to bring about raises within contemporary healthcare organizations.

Drawing upon participatory design principles, the co-design element in EBCD aims at opening up the boundaries of designing in healthcare services in order to include new stakeholders and forms of expertise; patients are called to share their specialist form of expertise (knowledge) and participate in the design process from the idea generation stage (Sanders and Stappers, 2008). In design science this is part of a major shift towards a new role for designers where 'the practice of designing is not exclusive to professional designers' anymore (Carr et al., 2009). It also draws upon the notion of 'co-creation' - as proposed by Cottam and Leadbeater (2004)- entailing the use of distributed resources and the participation of service users as 'vital to the design and delivery of services, working with professionals and front line staff to devise effective solutions' (Cottam and Leadbeater, 2004, p.22; see also Meroni and Sangiorgi, 2011, p.20) .

In the UK, there is considerable variation in what is termed 'co-design' in different services and sectors. And co-design is also practised differently, ranging from feedback and consultation to user testing, and from online collaboration and/or user research and workshops. As we discuss in more detail in the next section, in our study of researchers' and practitioners' experiences with EBCD worldwide in the period 2005-2013, we found that although over 85% of survey respondents reported implementing co-design activities as part of their EBCD projects, in practice their approach to this crucial stage of EBCD varied widely, with some of our participants wishing they had paid further attention to its role and significance (Donetto et al., 2014). The working definition

of co-design provided by Bradwell and Marr (2008) leaves room for multiple interpretations of how the concept translates into practice but is centred on four elements: participation, development, ownership and power, and outcomes and intent. In the case of EBCD we would operationalize these dimensions as follows:

- *participation*: co-design is a collaborative process in which as many stakeholders as possible have input;
- *development*: co-design evolves as a process, maturing and adapting as it takes place;
- *ownership and power*: co-design involves a transformation of ordinary power relations between stakeholders and aims to generate collective ownership; and
- *outcomes and intent*: co-design has a practical focus, notwithstanding that unplanned processes and transformations are likely to occur as collateral effects of the process.

In EBCD, the ‘co’ in co-design was intended to refer emphatically to partnership and shared leadership between patients and professionals within the NHS (Bate and Robert, 2007a). Co-design means more than just being responsive to patients and listening to their needs; patients are not just active partners ‘having a say’ in their care but actively contributing to the design of their care (Bate and Robert, 2007a, p30).

## **CO-DESIGN AND THE IMPLEMENTATION OF EBCD: LOST IN TRANSLATION?**

In order to make the principles and practices of EBCD widely available to anyone with an interest in healthcare quality improvement, a free-to-access, online toolkit incorporating several case studies was developed in 2011 through a collaboration between quality improvement practitioners and academics and disseminated through the King’s Fund charity

(<http://www.kingsfund.org.uk/projects/ebcd>). The toolkit is divided into 16 sections (for example, ‘Interviewing and filming patients’ and ‘Running the joint patient-staff event’), each of which incorporates video clips of participants in previous projects talking about their experiences and passing on hints and tips for others who may be interested in the approach. Since the launch of the toolkit in August 2011 - when online views reached almost 11,000 - the toolkit has received an average of around 3,500 views per month (Adams et al., forthcoming) and was recently updated to its second version in response to user feedback. Our survey responses indicated that users of the toolkit found it concise and easy to follow, and that it provided them with the practical tools for carrying out an EBCD project. They also highlighted the use of videos in the toolkit as a helpful way of illustrating the experience of patients, staff and carers involved in other EBCD projects.

By and large, practitioners and researchers who have used the EBCD approach – with or without the help of the toolkit - have found it promising. Over 90% of respondents in our survey reported that EBCD ‘really engaged patients’ and almost 80% said it ‘really engaged staff.’ However, what is evident from the limited published literature - as well as from analysis of the survey responses - is that the EBCD approach proposed by Bate and Robert (2007a) has undergone a variety of adaptations in response to a variety of local contingencies and organizational circumstances. From our survey and interview data, it was clear how those leading the implementation of EBCD perceive the approach as inherently flexible, tailoring it to the nature of particular clinical services and their own local contexts:

*Our learning re [sic] co-design is evolving. Using our first project as an example, we didn't use videos but collected stories through workshops. We had a pre-project workshop to get a mandate for the work. We didn't have separate staff and patient workshops, rather we had joint workshops. We relied strongly on journey mapping and identifying priorities together. We had a strong service design element, utilising the expertise of an external service designer. We also partnered with a bigger project which adopted a traditional PDSA project management approach. Each project since has involved [a] different approach building on our learnings and taking into account the situation and the timeframe. (Respondent#47)*

*We have already introduced a range of modifications as opportunity or constraints arise. I think EBCD is first a philosophy and only second a method, and methods need to evolve and grow as organizations grow smarter about working with patients. We use a lot of tools from service design and are evolving ones of our own. (Interview#18)*

These local adaptations have included the elimination of specific phases, particularly - it would appear - non-participant observation and the celebratory/review event (Figure 2). Beyond these obvious common omissions, although over 80% of projects reported conducting patient interviews many have dispensed with the (time- and resource-intensive) filmed component, whilst others have dispensed with one-to-one staff and/or patient interviews and resorted to focus groups. Many of the adaptations we have observed relate to the main criticism made of the EBCD approach by participants in our study (Figure 3): it simply takes too long (therein lies the justification for the development and testing of the ‘accelerated’ approach described above).

[Insert Figures 2 ad 3 here]

Most significant in our view are the adaptations to the 'small co-design groups'. It is clear that some of those leading projects are still struggling with the notion of co-design itself, asking in their survey responses for more examples to be provided of co-design meetings and the tools used, more information on how to make co-design events work, the 'fundamental' aspects of co-design and where 'shortcuts' could be made. Although over 85% of survey respondents reported implementing co-design activities as part of their project (Figure 2, above), follow-up telephone interviews revealed a wide range of approaches. Some stark examples included one project which entailed holding just one 'co-design' meeting where experiences were discussed and solutions determined but only with patients present; staff were then charged with developing and testing the 'solution'. Another project leader described how the small co-design groups were 'mainly staff as most patients felt that they had told us the issues and just wanted to learn what changes we had made.' This accords with Bowen et al.'s (2013) reflections on the application of EBD in an early case study involving outpatient services for older people. These authors suggest that 'the modest service improvement that resulted may be due to the specific structuring of participation and the limited ideation tools in EBD,' arguing that a reported 'perception of the designing as being something that was done by others' was a key shortcoming in this particular project (Bowen et al., 2013, pp.241-242). Participants in our study reflected on the significance of co-design to which some wished they had paid further attention:

*What worked for us was the frequent short meetings, and keeping in close contact. And I think for the patients and relatives to be there kind of held the staff to account, and to their action points. I mean they did divvy things up... there was something about, definitely for staff because of that thing that I said before about that humanistic kind of connection that it really drove them to complete actions. (Interview #08)*

*I think I would probably do more co-design events and sort of do more feedback as you go along really. I think definitely I would have benefitted from more co-design. (Interview#05)*

The question of expectations of the scale of change that may result from co-design approaches is also an interesting one in the healthcare context; witness the contrasting views reported by Adams and colleagues (forthcoming) of two members of staff in a colorectal cancer service:

*[for] the amount of time it [the EBCD process] takes you need to get some really good stuff out of it ... changing [things] a little bit... that's good, but is that good enough?*

*[People talk about minor but] How minor?... if that minor change affects 100 people that year, and it's a better experience for 100 people, how wonderful is that? (Adams et al., forthcoming)*

As noted above (see Box 1) the 'accelerated' EBCD (AEBCD) approach led to 48 co-design activities across four services, and these were similar in nature and scale to those typically seen in EBCD. Although small-scale changes and process redesign within one service area are the most common result of both AEBCD and EBCD, Locock and colleagues (2014) observed that small-scale change is often remarkably complex to implement, and what looks like a small change can be immensely valuable to patients. Moore and Buchanan (2013) have recently referred to this as 'sweating the small stuff'. Bowen et al. (2013) were clearly left a little underwhelmed by the changes brought about in the EBD project they led. There are, of course, several potential reasons why only 'modest' improvements were observed in their project (relative expectations being one) but we would certainly agree with the authors that one key area to focus on is the co-design phase of the approach. Interestingly, the authors comment that:

*'our own expectations (as participatory designers) about trajectories of change can also be naive when working in unfamiliar and complex organizational contexts. The slow (and uneven) progress from ideas to implementation, and the way that project proposals have been adapted and fused with other inputs to stimulate the actual changes, challenged our own morale and confidence about the impact of the work.'* (Bowen et al., 2013, p.242)

Where successfully implemented, the co-design stages of EBCD have proved powerful but still complex to implement in practice (Iedema et al., 2010, Piper et al., 2012, King's Fund, 2011, Boyd et al., 2012). Interview participants in our study commented:

*Co-design is very messy, and I'm totally comfortable with that, but it doesn't always work for clinicians in management because their lives are so regulated... they're often very cynical. Cynical in that they've seen everything tried... And probably their empathy, they believe they're empathetic, but they can't afford to be; you just see too much tragedy so you*

have a detachment that actually gets in the way. What I've found with co-design and particularly the conversation between staff and patients in co-design is the service connotations; it's often the first time they've ever talked with each other that way. So they're often very nervous initially, and I can almost time it, it's almost usually 20-minutes, a kind of a stand-off. And then they realize they actually feel the same way, they both feel disempowered and frustrated, and away we go you know. So you know there's a difficulty engaging people, but there's a huge pay off because staff then feel they have a very clear mandate from patients to change things. (Interview#17)

We got together and we discussed the narratives and we tried to identify, in collective discussion, where or how things could be improved, but when it then came down to what they were actually going to do, those decisions were taken by the frontline managers, the nursing managers, and their line managers. So there was certainly no co-design at that point... I think you can then identify how the hierarchies worked within the organisation, co-designed up to a point, and then it reverted back to a much more hierarchical way of organising things... a workshop with a draft action plan which was then taken away and worked on behind closed doors. (Interview#02)

I think there's a very big recognition of co-design as a way to go forward with things, but a lot of the services are steeped in the processes they've already got. And I think they're finding it hard to see where does it fit in with what we currently do. And it's about that medical model I think, where you've got the patient [and] carers who are just the receivers of service, what do they know, you know. So there's just still that wall to be knocked over yet as far as lived experience being something that's a valuable tool in informing services of what they're doing, and how to do it better. (Interview#07)

Despite its inherent complexity, in the EBCD projects carried out in Emergency Departments in New South Wales, Australia, co-design demonstrated a number of strengths including: allowing project staff to learn new skills; enabling frontline staff better to appreciate the impact of health care practices and environments on patients and carers; engaging service users in 'deliberative' processes that were qualitatively different to traditional forms of engagement; and enabling the service to implement solutions that met the wishes, advice and insights of patients and frontline staff (Iedema et al., 2010). However, where preparation, recruitment of patients and engagement of front-line staff were not possible or not consistent, co-design worked less well (Piper et al, 2012).

In an EBCD project carried out in breast and lung cancer services in the UK, the co-design stages also proved challenging: not all the co-design groups that formed were subsequently maintained and there were issues with the composition of some groups, which ended up including mainly or exclusively managers and clinicians (King's Fund, 2011). One member of staff participating in this project considered the emotional demands of working - as clinicians - alongside their own patients in a co-design process:

*[The co-design group was] nerve wracking ... I was sitting across a [meeting] table from a woman that I knew, I'd looked at her scan and I was going to have to tell her that her cancer had come back in the next clinic ... and she's telling me how brilliant her life is ...* (Adams et al, forthcoming)

Our interview data offered another staff perspective on this issue: that, whilst recognising the potential of co-design, most healthcare staff can find it very challenging to move between their familiar 'expert' and 'decision-maker' role and that of partner and colleague required by co-design work. In the words of one of our interviewees:

*I think that it worked because it was collaborative and there were mixed groups of people doing the work, they held each other to account. And kept people on track where perhaps it might have slid... I think people enjoy the bit of collecting stories, it's like consultation, I think that it's harder to do the co-design or collaboration after that initial problem solving phase because I think health professionals are used to being in charge of making things happen.*(Interview #10)

In his account of the implementation of the original EBD approach as part of an organisation-wide Lean intervention at Virginia Mason Medical Centre in the United States beginning in 2008, Plsek highlights co-design as a persisting challenge:

*...the full concept of co-design in EBD provokes a challenge. It involves deliberately empowering multiple patients and family members to be equal partners in decision making and detailed design, training them to be assertive, and engaging them in large numbers so that they feel even more empowered [...] getting to full co-design may still lie further out in Virginia Mason's future but the organization is committed to taking initial steps that seem to lead in that direction.* (Plsek, 2014, p.171)

The complexities of 'co-design' at the individual staff member and patient level in the healthcare sector become clearer when considering such insights. Implicit in participatory design approaches is the aim to change power relations but, as we discuss below, the evidence as to whether or not they do so in the health care setting is very scant; certainly we know little of the circumstances in which they are successful in this regard. Digging a little deeper into the detailed implementation of participatory design approaches such as EBCD often reveals tensions between the intended aims of co-design and its actual forms in practice. The authors involved in the EBCD projects carried out in Australian emergency care services make their own recommendations as to how to improve the co-design processes in EBCD - for example, by involving skilled facilitators, using a mix of involvement strategies, performing a 'co-design readiness' assessment, and obtaining recognition from management and policy makers (Iedema et al., 2010). However, what emerges from their and our considerations is that co-design is a complex social intervention whose impact and outcomes are difficult to evaluate and cannot be reduced solely to the design solutions it generates (Bradwell and Marr, 2008; Iedema et al, 2010). Other aspects could include, for example: the personal development of those involved in the process; changes in staff motivation, skills and self-confidence; and the development of trust and new relationships between participants in the process.

### **POWER RELATIONS IN CO-DESIGN**

As mentioned earlier (see p.6), the transformation of ordinary power relations between stakeholders and the generation of collective ownership are central to co-design. In Bradwell and Marr's words:

Co-design shifts power to the process, creating a framework that defines and maintains the necessary balance of rights and freedoms between participants. There is equality of legitimacy and value in inputs from all those involved, whether suggestions entail large- or small-scale changes. This combination of controlled abrogation of power by those with whom it usually rests, and the concomitant empowerment of those in a traditional 'client' role, serves to create a sense of collective ownership. (2008, p.17)

Bradley and Marr's vision of the power shift inherent within successful co-design is clearly something of an ideal case scenario; certainly evidence emerging around the implementation of EBCD suggests that the everyday reality of practice makes achieving this vision rather complex. At this point we wish to draw attention to the need for service designers and researchers to look more closely and more critically at the ways in which co-design practices can and do mobilise and affect power relations amongst participants. To date the co-design and co-creation literature has - we would argue - largely failed to critically engage with issues of power and power relations within these processes (Farr, 2013); with few notable exceptions (e.g. Bratteteig and Wagner, 2012) current strands of design work focusing on empowerment and participation have also neglected to

look at power in detail (see, for example, the case of ‘transformation design’ (Sangiorgi, 2011). And yet practitioners of EBCD have highlighted the importance of attending to the effects of specific configurations of power on the process of co-design and the implementation of changes (Bowen et al., 2013, p.14); similarly, researchers have called for a closer examination of how co-design mobilises ‘dialogical innovation’ through instantiating the space and processes for democratic deliberation (Iedema et al., 2010, p.84). However, studies with this focus have not yet been undertaken. In view of the spread of EBCD (and similar approaches throughout the public sector) and the uncertainty and confusion around the co-design phase of EBCD documented by responses to our recent survey, we suggest that in-depth analyses of how power relations operate and are transformed – if at all – in co-design work within public services are long overdue for at least two reasons: firstly, inherent to co-design are notions of equality, equal contribution, and mutual respect that are proving difficult to establish in health care contexts where traditional roles of provider and recipient of care are clearly demarcated; and, secondly, without critical understanding of the different types and facets of power operating within a specific setting, their configurations, and their possible effects, the discourses of service user empowerment and democratization of service provision risk being deployed simplistically, thereby obfuscating more subtle forms of oppression and social exclusion.

Beresford (2002) distinguishes between the ‘managerialist’ (i.e. driven by state agendas) and ‘democratic’ (i.e. built on the collective action of citizens/welfare service users) models of service user participation. Drawing on this and her empirical case studies in the public sector, Farr (2013) discusses how citizen involvement can facilitate innovation in public services in ways that can, at one extreme, be constrained by ‘politically defined visions of the future’ or, at the other extreme, be radically emancipatory in nature, challenging existing conceptual frameworks, discourses, and decision-making pathways, bringing about transformation in policy, culture, and/or provision of services. Echoing Bowen et al (2013), Farr (2013) points out that co-design activities and projects are usually initiated and hosted by institutions (which also usually obtain and manage external funds for such initiatives), with subsequent limitations to the ways in which citizen participation is framed and enabled; nevertheless, she observes, these activities and the interactions they occasion can begin to bring to light issues that institutions had not previously examined. This observation resonates with the suggestion from Iedema and colleagues that co-design (in EBCD) has - in line with a ‘democratic’ model of service user participation - the potential to challenge existing discourses by instantiating new discursive spaces and new discourses that ‘traverse people’s sociocultural, professional and personal boundaries’ (Iedema et al., 2010, p.86).

In studying the power dynamics involved in co-design work, the focus on discourses of involvement and collaboration is particularly useful. Analyses of discourses are remarkably apt to

illuminate how power relations operate in human interaction and how discourses which aim to challenge existing power configurations can, in fact, contribute to reinforcing or reproducing them (see, for example, the potential of discourses of patient involvement in cancer care to undermine care equity in Sinding et al., 2012; or the possible disempowering effects of discourses of self-management of chronic conditions in Salmon and Hall, 2003, or Thille et al., 2014). The problem with much of the well-intentioned mobilisation of collaboration and user engagement discourses in the context of public services design, innovation, and improvement, is that, as Cribb and Gewirtz argue:

...the shift towards greater user involvement is typically couched by its advocates as being ethically straightforward and as an unalloyed good, because it represents a transformation of users from a role of passivity and dependence on the paternalism of professionals to more active, empowered and respected autonomous persons. (2012, p.509)

As these authors go on to illustrate, such one-dimensional and relatively uncritical readings of service user engagement 'fail to represent the ethical complexities embedded in welfare relationships' (Cribb and Gewirtz, 2012, p.510). Current co-design practices for public services need – we suggest – to be examined more closely with a critical approach to power and its effects that can illuminate complex questions such as which 'publics' are being engaged and/or excluded by current practices, how these practices affect identities and subject positioning, what their ethical and political implications are, and what role(s) they allow for design expertise. In order to be theoretically rich and also directly relevant to practice, the analyses we call for would need to draw upon the conceptual and methodological tools of different traditions and scholarships – sociology, design, organizational science, participatory action research, and anthropology to name a few – and grounded in multi-layered conceptualisations of power and resistance (e.g. capillary power as opposed to sovereign power as in Foucault, 1977, 1980, 1998; 'productive resistance' as in Courpasson et al., 2012; see also Masterson and Owen, 2006, for a discussion of theories of power and service user empowerment in the context of mental health care, or Broer et al., 2014, for a recent analysis of power and powerlessness in participatory practices in mental health care). Furthermore, in examining the networks and shifts of power in collaborative work aimed at improving the quality of people's (users, workers, citizens, publics) experiences of public services, it is imperative – if we aim to influence practice – that we begin to outline what transformed configurations of power might look like. For example, would a redistribution of decision-making power mean that spaces and/or mechanisms should exist for healthcare co-design work to be initiated and managed by patients? Or, would Social Innovation Labs be a useful model for bringing about new forms of citizen participation in healthcare design (see for example SILK – Social Innovation Lab for Kent – born from the collaboration between Kent County Council and

Engine Service Design;<sup>1</sup> or the ‘agonistic democracy’ model implemented in Sweden through Malmö Living Labs (Björgvinsson et al., 2012)?

## CONCLUSIONS

In illustrating the principles and practices of the Experience-based Co-design approach to healthcare quality improvement, we have aimed to provide an overview of our understanding of the strengths and weaknesses of the approach and to highlight in particular the challenges that co-design can entail when used in the context of public services. We have argued that the adoption and implementation of co-design in public services requires critical approaches to both organizational processes and to design practice. When applied in the institutional healthcare setting, participatory design approaches often acquire a distinct political dimension by seeking to re-configure the relationships of power between citizens and public services. We call for critically oriented cross-disciplinary research efforts to illuminate the potential of co-design practice to bring about such reconfigurations of power relations, the appropriate role of design expertise within such processes, and their eventual impact on the quality of patient care.

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<sup>1</sup> <http://socialinnovation.typepad.com/silk/>. Last accessed 14<sup>th</sup> March 2014.

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FIGURE CAPTIONS

Figure 1- The six stages of the EBCD approach

Figure 2 - Adaptations to the EBCD approach (source: Donetto et al., 2014)

Figure 3 - Weaknesses of the EBCD approach (source: Donetto et al., 2014)

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