

# **Improving Patient Experience in Hospital Settings: Assessing the Role of Toolkits and Action Research Through a Process Evaluation of a Complex Intervention**

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## **Abstract**

This article presents a process evaluation of the implementation and refinement of a patient experience toolkit (PET) by action researchers in six hospital wards in the English National Health Service (NHS). An initial assumption that health care professionals (HCPs) would use PET to improve patient experience proved unrealistic due to staff and service pressures. However, the action researchers' facilitation of PET and their support during the implementation of quality improvement efforts filled in for HCPs' lack of time. The findings suggest that the PET can be a successful guide for skilled facilitators working with HCPs, although excessive staff pressures should be avoided. Toolkits designed for implementation by HCPs should, therefore, be used sparingly; a more appropriate target audience may be facilitators. Furthermore, while the potential of action research is confirmed by this evaluation, HCPs' time to engage in service improvement is found to moderate the success of this increasingly prominent methodology.

## **Keywords**

toolkit; patient experience; quality improvement; process evaluation; action research; complex intervention; facilitation; staff and service pressures; qualitative; Europe; North of England

## **Introduction**

Patient experience is widely recognized as a central pillar of care quality. It has become a priority of health systems globally (Darzi, 2008; Institute of Medicine, 2001), in part because of the moral case for enhancing patients' status and rights as service users (Groene, 2011). Evidence is also accumulating of associations between patient experience and health and patient safety outcomes, adding to the case for prioritizing patient experience (Anhang Price et al., 2014; Coulter, 2012; Doyle, Lennox, & Bell, 2013). Precisely how patient experience might be improved, however, is unclear. An explosion in the collection of patient experience feedback (Davidson et al., 2017; Edwards, Walker, & Duff, 2015; Gleeson et al., 2016) has not been matched with efforts to actively use it in service improvement (Coulter, Locock, Ziebland, & Calabrese, 2014; DeCourcy, West, & Barron, 2012). There appears to be an assumption that simply providing feedback to health care professionals (HCPs) is enough (Reeves, West, & Barron, 2013), when a significant body of research highlights barriers to the effective use of patient feedback in practice (Davies & Cleary, 2005; Gleeson et al., 2016; Krawczyk et al., 2018; Sheard et al., 2017b). Hence, a patient experience toolkit (PET) for enhancing the use of patient feedback by HCPs was developed, implemented, and refined using action research methodology.

The use of action research in the present study reflects wider trends away from the previously dominant experimental paradigm toward more participatory research and improvement approaches (Waterman et al., 2007). Action research is considered suited to the complexity of both improvement efforts and the health care environments they seek to change because of its formative and participatory nature (Hart, 1995; Walsh, Grant, & Coleman, 2008). Ideas are emergent or can be adapted to implementation settings from elsewhere, and there are no controls on the use of local resources and relationships, as in the case of experimental research (Waterman et al., 2007). The method was particularly suitable for the current project given the challenges involved for HCPs to successfully act on patient feedback enhancing the use of patient feedback by HCPs was developed,

implemented, and refined using action research methodology. The use of action research in the present study reflects wider trends away from the previously dominant experimental paradigm toward more participatory research and improvement approaches (Waterman et al., 2007). Action research is considered suited to the complexity of both improvement efforts and the health care environments they seek to change because of its formative and participatory nature (Hart, 1995; Walsh, Grant, & Coleman, 2008). Ideas are emergent or can be adapted to implementation settings from elsewhere, and there are no controls on the use of local resources and relationships, as in the case of experimental research (Waterman et al., 2007). The method was particularly suitable for the current project given the challenges involved for HCPs to successfully act on patient feedback (Krawczyk et al., 2018; Sheard et al., 2017b). Yet, while participatory research is considered uniquely suitable for solving complex problems within specific settings, a trade-off exists between the apparent dynamism of the approach and diminished transferability (Hammersley, 2004; Larkin, Boden, & Newton, 2015). Reflecting on this tension, Larkin, Boden, and Newton (2015) note that most qualitative researchers would welcome attempts to link research to action, but the need to develop interventions for use across health care settings, which they call “translational activity,” is more jarring. They call for novel mechanisms and processes for the “scale up” of learning from modest sample sizes to larger degrees of consensus across health care settings (Larkin et al., 2015).

The present study sought to address this challenge of transferability by combining action research with the codesign of a toolkit (PET) and a process evaluation. Toolkits are increasingly used as a mechanism of knowledge transfer in health care research (Barac, Stein, Bruce, & Barwick, 2014; Yamada, Shorkey, Barwick, Widger, & Stevens, 2015) and would, therefore, solve part of this challenge. Examples include the “Diabetes Literacy and Numeracy Education Toolkit” for patients with low literacy and numeracy skills to enhance their ability for self manage (Wolff et al., 2009) and the “Cardiovascular Disease Toolkit” for promoting adherence to evidence based guidelines among general practitioners (GPs) regarding cardiovascular disease risk assessment and reduction strategies (Shah et al., 2014). Yet, despite an increase in their use, evidence of the effectiveness of tool kits is limited (Barac et al., 2014; Yamada et al., 2015), and there is some concern that they are being used in a way that downplays the complexities of service improvement (Sharp, Boaden, Dixon, & Sanders, 2018). A process evaluation was, therefore, combined with action research to ensure a robust, independent evaluation of PET as it was being refined on its implementation. The two methods were designed to complement each other. The “action” component of action research would focus on providing assistance to the ward teams in their use of PET Prototype 1, while the “research” component of the method would reflect and refine PET as the project progressed. The process evaluation, which forms the basis of this article, ran alongside the action research and sought to develop a comprehensive understanding of PET’s effectiveness, guided by the realist evaluation questions of “what works, for whom, when and why” (Pawson & Tilley, 1997).

## **Method**

### *Study background and setting*

Three NHS (National Health Service) hospital trusts (the term trust refers to an NHS organization, which provides care to patients) based in the North of England and six ward-based teams were involved over the two phases of the project. The three trusts were selected to provide diversity in terms of size and patient population. The smallest trust is a small district general hospital, which serves an affluent town and a wider rural population. The middle trust is a medium-sized teaching hospital based in a large city with some of the highest levels of deprivation and ethnic diversity in the United Kingdom. The largest trust is one of the largest teaching hospitals in Europe, situated in a major city, which has pockets of affluence alongside deprivation. The specialty of wards involved in

the study was also heterogeneous. The six wards were sampled and provided diversity in terms of specialty, size, and patient throughput. The specialties of the wards were accident and emergency (A&E) department, male surgery (this represents two wards at different trusts), maternity department (including ante- and postnatal services), female general medicine, and an intermediate care ward for older patients.

The six participating ward teams attended three codesign workshops during Phase 1, over a period of 12 months. The workshops were led by an external codesign team and sought to develop understanding about how patient experience feedback might be used in service improvement at ward-level. PET Prototype 1 was created at the end of phase, taking the form of a large turquoise ring binder featuring eight stages for wards teams to go through

1. A team-planning exercise to bring together a core, patient experience team at ward-level, consisting of HCPs and patient representatives,
2. A guiding principles exercise to encourage reflection among the core team on the importance of patient and public involvement in health care,
3. A data collection phase to compile existing patient feedback and to collect more if necessary,
4. A data triangulation process to analyze and make sense of these different forms of patient feedback,
5. A linking stage to develop contacts within the host trust to obtain further data if required or to escalate issues,
6. A reflection session guided by an external facilitator for helping staff to consider their feedback and begin prioritizing actions,
7. The application of QI methods to support staff in making actions and monitoring the impacts of any improvement attempts, and
8. A celebratory phase to share stories of success, thereby enhancing staff and patient morale.

The purpose of the action research was to implement and refine PET Prototype 1 in Phase 2, over a period of 14 months, with the process evaluation providing an independent account of its effectiveness. The action researchers (x2) and the evaluator (T.M.) were part of the same research institute, but independent of each other. The action researchers worked closely with the HCPs and other hospital staff involved in the project, many of whom were also interviewed as part of the evaluation. L.S. and R.L. supported the evaluator and the action researchers, but were not directly involved in the action research as participants. The final iteration of PET is now being promoted for use across the NHS by a specialist health care improvement organization attached to the research institute. Further details can be found on the website where PET is hosted (Improvement Academy, 2018).

#### *Type of process evaluation*

The use of process evaluation to evaluate an intervention undergoing development and implementation through action research is an uncommon research approach. It may represent a qualitative solution to the diminished transferability of participatory research highlighted by Larkin et al. (2015). Process evaluation has increased in prominence in recent years amid recognition that

understanding of interventions and their delivery contexts is required if they are to realize their full potential (Davidoff, Dixon-Woods, Leviton, & Michie, 2015; Dixon-Woods, Leslie, Tarrant, & Bion, 2013; Moore et al., 2015; Tancred, Manzi, Schellenberg, & Marchant, 2017). The method typically involves evaluating implementation processes across predetermined criteria (fidelity, dose, and reach) or identifying the enablers and barriers to the use of already standardized interventions (Tancred et al., 2017). This approach had to be adapted here because the use of action research to develop and implement PET meant it was unclear at the start what the “intervention” was or how “it” should be implemented. It was expected that the eight toolkit stages (see “study background” for details) would be adapted over the course of Phase 2, while the role of the action researchers in providing guidance and facilitation to ward teams was unclear. Having to come to an understanding of the intervention while evaluating it, the evaluation, therefore, had to be more open-ended than typical process evaluations. An abductive approach to theory development was adopted, seeking to test a simple program theory (Funnell & Rogers, 2011) for the PET Prototype 1, summarized thus: Use of PET Prototype 1 by health professionals with the assistance of action researchers can lead to improvements to patient experience. This was to be tested through the qualitative assessment of the perceptions of stakeholders involved in developing and implementing PET. The diversity of stakeholders and intervention sites involved, that is, the three hospitals and six wards, meant it was possible to explore the full range of realist evaluation questions of whether, how, for whom and in what contexts PET works (Pawson & Tilley, 1997).

#### *Data collection*

The methods of data collection were specifically tailored to account for the status of the intervention as being both implemented and refined through the action research. To track the intervention’s development and capture their reasoning and tacit knowledge over the course of the project, the action researchers kept detailed reflective diaries for each ward, based on a prompt created by the evaluator. 119 diary entries were entered in total. In addition, the evaluator (T.M.) undertook 42 participant observations of the 68 project meetings that took place to capture actions and events of interest to the evaluation. Detailed “pen portraits” were also compiled by T.M. for each ward, a method used previously by the research team to provide a linear, longitudinal narrative account of how wards participating in research projects engage over time (Sheard et al., 2017a). By the end of the project, these provided a detailed story of each ward’s progress with PET Prototype 1, consisting of summaries of the reflective diaries and participant observations, interspersed with “analytic memos” (Gale, Heath, Cameron, Rashid, & Redwood, 2013) where emerging themes were discussed for later analysis.

Qualitative interviews with key stakeholders were also conducted. A round of interviews was undertaken at the halfway point with the HCPs who had taken on a leadership role in the project and other key stakeholders. Interviews were semistructured and sought to illicit stakeholder views of the intervention and the enablers and barriers to its use. 17 were undertaken in total, consisting of HCPs (n = 9), patient representatives (n = 4), and members of patient experience (PE) teams employed by the participating trusts (n = 4). In addition, action research focus groups, featuring the two action researchers and a range of the participating HCPs, patient representatives and corporate staff, took place at the end of the project, providing additional, end point data for the evaluation. All data were transcribed and fully anonymized. Wards were assigned number codes across all data sets to ensure anonymity (1, 2, 3, 4, 5, and 6). Staff members and patient representatives were assigned the same number as the ward they were attached to, while trusts were assigned a letter code (A, B, and C).

#### *Data analysis*

Data analysis included iterative stages for organizing the data, coding (both descriptive and analytical), theorizing and writing. An inductive, thematic analysis was undertaken of the data to ensure that the themes that emerged reflected the data (Guest, Macqueen, & Namey, 2012). T.M. undertook initial analyses of the action researchers' reflective diaries and participant observation field notes as they were written in each ward's pen portrait (see data collection section for further details on pen portraits). This served to keep a record of T.M.'s reflections of events over time and to integrate the data from the reflective diaries and participant observation field notes. At the halfway point, T.M. used Microsoft Excel to develop an initial coding framework based on the pen portraits and the interview transcripts, using inductive framework analysis techniques (Gale et al., 2013). L.S. did the same with a sample of six interview transcripts and a shared coding framework was then developed between T.M. and L.S. through consensus discussion. This was subsequently applied to code all data. Discordant examples were actively sought during this process, with the themes being refined if found to be limited via comparative analysis (Corbin & Strauss, 2008). L.S. and T.M. had extensive discussion once all data had been collected to ensure that the themes were summarized so as to convey the core functioning of the PET intervention.

### *Ethics*

Ethics approval was required for the study and this was granted by the Yorkshire & Humber—Bradford Leeds Research Ethics Committee on 04/11/2016. The Health Research Authority granted approval on 25/11/2016. All participants gave informed, written consent to take part in this study.

### **Results**

Six main themes were identified in the analysis. These are partial implementation of PET Prototype 1 was achieved across the six participating wards despite difficult circumstances, the toolkit documentation was perceived by HCPs as being too bulky and time-consuming to be used by them, the facilitator role was more expansive than originally envisioned, strong relationships between the people involved was a key enabler of the project, organizational support for the action researchers and ward teams was a further key enabler, and success required that the action researchers adapt their approach for each ward, but there were limits to the extent they could work around staff and service pressures.

#### *Theme 1: Partial Implementation of PET Prototype 1 Was Achieved Across the Six Participating Wards Despite Difficult Circumstances*

The six wards involved in the project had varying degrees of success going through the eight stages contained within PET Prototype 1 (see "study background" for details). A key learning point at the beginning of the project concerned the value of having patient representatives go onto the wards to collect "live," qualitative data from patients through informal discussions. Such "live" data were required because the patient feedback available at a ward-level, including those derived from the national NHS survey the "Friends and Family Test," was generally found to be untimely and lacking in detail. The one exception was the A&E department, which did not require live data collecting because of a high FFT response rate due to high patient throughput. Once collected on the wards that required it, the live data were used as a basis for the reflection sessions and provided a qualitative baseline to assess the impacts of changes after a follow-up round of live data collection. All the wards got to the stage of applying QI techniques to a patient experience issue identified as significant in their reflection sessions, but they had varying degrees of success in developing, implementing, and evaluating the changes they introduced.

Ward 1, Ward 4, and Ward 6 fully completed PET Prototype 1 and the follow-up round of live data collection revealed positive impacts. Ward 1 had introduced an information leaflet to welcome patients and keep them informed about the services on offer because poor communication had been identified as an issue in the reflection session. Patients were found to appreciate the leaflet and there was evidence that HCPs were using it when communicating with patients on admittance. Ward 4 introduced a communal lunch in the hope of reducing loneliness and creating a sense of community. This change may have improved patient experience as the follow-up round of live data indicated a reduction in loneliness and patients and staff alike welcomed it, the latter identifying the unanticipated benefit of helping with patients' rehabilitation through improved mobility. Ward 6, in a similar attempt to tackle loneliness, introduced a new ward round involving health care assistants striking up informal conversations with patients, during which they were asked if they had any nonmedical concerns and issues. This was sometimes difficult to implement in busy times, but was found to have enhanced the visibility of health care assistants, and improved patients' communication with them.

The remaining three wards did not implement PET Prototype 1 in full, but still implemented changes to their ward environments and processes. Ward 2 focused on conveying their overwhelmingly positive feedback to patients and staff through posters and leaflets, while Ward 3 purchased door and bin silencers to reduce noise-at night. But the project work on both of these wards tailed off because of a combination of difficulties setting up a core ward team and staff and service pressures. Ward 5 sought to provide patients with information about the next two significant events that would happen while on the ward, dubbed "2 steps plus time." This was rolled out over a period of 3 months, but had to be paused due to severe staff and service pressures that resulted in all non-clinical time of staff being pulled locally by the trust. Although these various initiatives were not fully implemented or evaluated, they were identified as being required through the reflection sessions carried out as part of the PET process, and may have had some impact on patient experience on the wards.

### *Theme 2: The Toolkit Documentation Was Perceived by HCPs as Being Too Bulky and Time Consuming to Be Used by Them*

Although all of the wards got some way through the process embedded within PET Prototype 1, the actual toolkit documentation was rarely, if ever used by ward teams. This was despite PET Prototype 1, taking the form of a large, turquoise ring binder, being presented to the teams in their first ward meetings as something that was theirs and which they would be using. Interviews with the ward managers at the halfway point revealed a significant degree of skepticism toward the toolkit documentation (Ward Managers 3, 4, 5, and 6). Some ward managers saw the toolkit documentation as too large (Ward Managers 3, 5, and 6), while criticisms were also made of certain of the stages contained within it, most notably the values exercise designed for use by ward staff (Ward Managers 3, 4, 5, and 6). One ward manager who had not been able to attend the codesign workshops saw the whole process as too time-consuming, stating

*This has clearly been worked out by somebody who has had time and time is something I do not have. (Ward 3, Interviewee 1, Ward Manager 3)*

Ward manager 1 liked the toolkit but, even then, it did not feature prominently in the meetings they were involved in. They also preferred other resources that had been developed by the action researchers during the project work:

*You can use the toolkit to think “right, how do we get from x to y” and it helps you with that doesn’t it? Whether we’ve used it fully as they want us to use it is another matter. That’s what you’re going to ask me next isn’t it? (laughs) It’s very possibly not happened but I think it has happened on other bits of paper. (Ward 1, Interviewee 2, Ward Manager 1)*

Other ward managers pointed to resources developed by the action researchers as evidence of them using the toolkit (Ward Manager 4, 5, and 6). This is significant because the resources in question had not been developed by the action researchers to replace the toolkit documentation, but were outputs of the improvement work, such as flowcharts and patient feedback posters. The ward managers were clearly distant from PET Prototype 1 despite it being designed by and for them. Yet, improvement work was taking place on their wards despite that distance.

For the action researchers, PET Prototype 1 featured occasionally in their reflective diaries and similarities could be noted between the action researchers’ and the ward managers’ concerns. There was a shared concern about PET’s size and certain stages of the toolkit process contained within it. The values exercise was widely seen as condescending to HCPs who already appreciated the value of patient experience, seeing it as central to their work. Toward the end of the project, more fundamental objections to the concept of a toolkit designed for use by HCPs were raised. The final stages of the action research saw the final iteration of PET be redesigned to guide facilitators working with HCPs on patient experience rather than HCPs themselves.

### *Theme 3: The Facilitator Role Was More Expansive Than Originally Envisioned*

Research participants overwhelmingly agreed that the action researchers’ work facilitating PET Prototype 1 was more important to the project’s progress than the toolkit documentation. Some of the core facilitation tasks were not anticipated beforehand, but emerged as the project unfolded. On finding that none of the wards had patient feedback available to them in a usable format, the action researchers summarized existing data and/or made arrangements for more to be collected. One ward had sufficient survey data available (Ward 5), while “live” data were collected on the others (Wards 1, 2, 3, 4, and 6). Mostly, these were collected by the patient representatives assigned to a ward (Patient Representatives 1, 3, 4 and 6) although the action researchers collected the data on Ward 2. This was then organized into topics by the action researchers, patient representatives, and some corporate staff, in what was referred to as a “collective, interpretative process.” The action researchers facilitated these sessions and created patient feedback handouts for each ward based on the discussions. They then presented these to the ward teams and guided them through improvement cycles. It was anticipated at the start that knowledge of QI science, particularly, the Plan-Do-Study-Act (PDSA) approach, would be crucial here and both action researchers attended courses to increase their knowledge of the approach. Yet, a number of skills that were critical to PET’s delivery were not covered in these courses, including how to use QI techniques in extremely busy hospital ward environments and how to creatively apply them to patient experience, the intangible nature of which meant it was sometimes difficult to measure outcomes in a meaningful way. In addition, outputs of the PDSA cycles, such as posters and leaflets, had to be designed for use on the wards, requiring additional skills on behalf of the action researchers. It was observed that frontline HCPs did not have the time or the skills to undertake these tasks.

An additional, emergent facilitation activity was the more intangible efforts to encourage ward staff to believe they could make changes despite the pressure they were under. Strategies included, for example, focusing on “quick wins” first to show what could be done or celebrating existing examples of good patient experience. The action researchers referred to this as encouraging a positive sense of the “art of the possible.” Finally, the facilitation sometimes involved escalating issues when they

required the input of other hospital departments. Over the course of the project, the action researchers contacted a range of actors as part of the ward action plans, including PE teams and volunteering services. Escalation included procuring door stoppers and bin silencers to address noise-at-night (Ward 3), securing volunteers for wards (Wards 4, 5, and 6) and clearing project outputs through relevant trust authorities (Wards 1 and 6). Newly established connections could also be drawn upon when problems arose. Some “escalation” activities were also carried out by PE teams and Ward Manager 3 was adept in this regard, contacting their IT and estates department (for building and grounds upkeep) as part of the project work. Three ward managers saw the new connections formed through escalation as a positive outcome of the project (Ward Managers 4, 5, and 6). Although these connections made ward-level improvements possible, they also opened opportunities for further improvement work in the future:

*By being part of this project it's opened more doors so if we needed more support or we needed something else implementing we have got that. There is an individual for each area where you can tap into a resource and just say “look, it isn't working, we need this, this and this.” Like [local PE team member] is wanting to look at different things. He has come into [ward 5] to observe and bring some fresh ideas. (Ward 5, Interviewee 3, Ward Manager 5)*

#### *Theme 4: Strong Relationships Between the People Involved Was a Key Enabler of the Project*

The complex facilitation activities carried out by the action researchers were enabled by their location at a major research institute in the North of England. The action researchers had a network of expertise to draw on when required, including two improvement specialists on the study steering group. They also established close relationships with the patient representatives, ward teams, and the corporate staff of participating trusts, both before and during the project. In addition, the research institute's established patient and public involvement networks and links to the volunteering services of participating trusts meant that patient representatives were available and could take on a vital role in the project. Some brought with them knowledge of the role and had relevant work experience that meant they were particularly suited to working closely with staff and collecting “live” feedback from patients. Likewise, great care was taken by the action researchers to develop and maintain relationships with the ward staff. Not only was their involvement crucial for improvements to be made, but the action researchers viewed the trusting relationships built up with staff as key to allowing often highly emotional patient feedback to be discussed openly.

The participatory nature of action research meant that these relationships assumed even greater significance than they would have in a standard research project. Corporate staff, ward staff, and patient representatives were engaged with as coresearchers and were recruited into the project as such. The action researchers also took the participatory ethos of action research seriously, frequently discussing its implications for their practice. This is significant as it may have shaped how the staff engaged with the project. Ward managers interviewed at the halfway point appreciated the participatory nature of the project. Ward Manager 2 stated that they liked developing something “straight out of the box” rather than being told to implement something developed elsewhere. Ward Manager 3 spoke of how they liked that problems identified in patient feedback were not just seen as errors, but could be interpreted and explained through dialogue. Ward Manager 4 spoke of how it was empowering for staff, which was important as they were set to leave the ward:

*It's nice for the staff to be able to identify areas that they want to improve on because ultimately, and I have said this the whole way through, I'm not a permanent fixture here in terms of the ward manager and I will hopefully very soon be back to my original ward so they need to feel empowered to make changes themselves once I'm gone. So you know it has*



*been nice to work collaboratively that way so that the staff feel that actually this is something that they can do themselves for the patients, they don't need somebody telling them that this is what you need to do and it's nice for them to be part of the decision making process. (Ward 4, Interviewee 6, Ward Manager 4)*

*Theme 5: Organizational Support for the Action Researchers and Ward Teams Was a Further Key Enabler*

The project received significant organizational support from the three participating trusts, although the level and nature of the support differed between them. Each trust had a PE team that provided most of the support and one PE team effectively integrated the project into their own work on patient experience. The attendance of a PE lead at ward meetings was critical to the project's advance on Ward 6, as the ward manager expressed initial reluctance to get involved. That a prominent member of corporate staff attended the meetings may have served as a signal of Trust C's commitment to the project and opened up new opportunities for collaboration, which was appreciated by the ward manager. The PE teams also had a significant role to play when the project encountered difficulties related to staff pressures. The most notable example here occurred on Ward 5 when all project meetings had to be canceled because staffing and service pressures resulted in all nonclinical time of staff being pulled centrally by the trust. With the action researchers having to withdraw from the field, they reached agreement with the local PE team to continue supporting the ward's improvement work. The local PE team produced a patient information leaflet and took it through a lengthy clearance procedure involving the trust communications and medical illustration departments.

The involvement of PE teams meant that organizational learning emerged as a main outcome of the project. The two PE teams who were heavily involved spoke of how they learnt about the support that is required for frontline staff to successfully work on patient experience feedback. On seeing the potential of having patient representatives to collect "live" feedback, one of the PE teams planned to replicate their role across Trust B. The new connections forged between the PE teams and the wards also make future collaboration possible. A PE team member from Trust C welcomed this, emphasizing positive impacts of the project beyond the immediate use of PET:

*This came about as a direct result of [the action researchers] involvement. Their involvement kick-started how [ward 5] were looking at themselves and how they could improve the service to patients. And now that I have got a relationship with the matron we are beginning to look at other things we can do. So although the toolkit might not be at the forefront of our thinking, all these other things wouldn't have happened without their involvement. I don't know how you capture that other than to say it sparked this interest and wider thoughts about what could be done. (Trust C, Interviewee 15, PE team member)*

*Theme 6: Success Required That the Action Researchers Adapt Their Approach for Each Ward, but There Were Limits to the Extent They Could Work Around Staff and Service Pressures*

A central characteristic of the action researchers' facilitation was how it was able to adapt to each ward environment. The action researchers were highly adaptive when it came to the roles and responsibilities of the ward team members, sometimes doing tasks for one ward team that had been carried out by ward managers or patient representatives on other wards. This depended on a range of factors, such as how team members chose to engage, the time they had to engage, and their skills and capacity to engage. Sometimes, the action researchers could be seen trying to ensure the right person led on the improvement work, recruiting people into the project who expressed an interest

and occasionally bypassing people who exerted an unhelpful influence in ward meetings. Similarly, ward teams that were suspected of selecting easy issues could be encouraged to take on something more challenging, while those who were overly ambitious were encouraged to address “quick wins” to avoid disappointment. Greater emphasis was also placed by the action researchers on the celebration of existing good practice for those ward teams observed to be lacking in self-belief, while escalation was deployed to get the buy-in of other people and departments when that was required. However, these context sensitive facilitation strategies were more successful in some ward settings than others.

It was easier for the action researchers to strike the right balance of roles and responsibilities in the ward teams when a large and diverse group of staff were involved in the project. Two of the ward managers mostly worked alone, which complicated progress on their wards, particularly when one of the ward managers left for another position and no one was available to continue on with the improvement work. Similarly, getting the buy-in of some individual or department was easier and more successful when organizational support was already high and more difficult when the action researchers had to form a relationship first to request support. Furthermore, the action researchers could only partly ameliorate the effects of staffing issues. For example, despite the pivotal role that the local PE team played in progressing Ward 5’s project after project meetings were put on hold when all nonclinical time of staff was pulled by the trust, the ward did not fully implement the process contained within PET Prototype 1. On other occasions, the action researchers’ concern for staffs’ well-being led them to unsuccessfully escalate to see whether more staff could be assigned to wards or to ask for support for the staff as part of their “duty of care” as researchers. An entry into their reflective diary shows the level of concern that one of the action researchers had following a meeting with staff, which led them to reflect on how they might “lobby” to improve the situation, alluding to limits to the facilitation role:

*They kept letting off steam about really emotional and high intensity situations they are finding themselves in as staff at the moment—not being able to meet all patients’ needs (some of which are urgent and life/death situations). They described the strain on staff and the fact that support mechanisms were currently being put in place for staff to cope. I still feel quite emotionally affected even writing about this. It had a profound effect on me . . . I cannot help thinking that the urgency of the situation needs discussing and not dismissing. Is a PE project appropriate when there are such pressing demands on the service? Is it that a PE project is needed even more, or do we all just need to lobby to try and raise the profile of the desperate situation? I am undecided. (action researcher’s reflective diary)*

## **Discussion**

he results reveal a nuanced account of PET’s effectiveness as a guide for improving patient experience. The initial assumptions or “program theory” underpinning PET Prototype 1, that its use by HCPs would improve patient experience with the action researchers taking on a supportive role, proved unrealistic because of pressures on staff time. Staff did not play the leading role on PET’s delivery that they were expected to, and the toolkit documentation was rarely, if ever consulted by them. However, the action researchers’ facilitation of PET, initially expected to be more supportive than directive, took over where HCPs were not able to lead. Teams of HCPs still attended project meetings across all six wards and were often heavily involved in the improvement work. But the action researchers took on some of the roles that ward teams had been expected to take on while they also carried out a significant array of emergent activities, such as “coaching” wards staff to enhance their sense of self-efficacy. It was also mostly the action researchers who escalated issues and fostered connections and relationships across departments in host trusts. This enhanced

facilitator role meant it was possible to implement successful projects with demonstrable improvements to patient experience on three of the wards. The remaining three wards implemented changes, but did not fully complete implementation of PET, due to staff and service pressures.

The evaluation findings have significant implications for how PET should be used in future. In recognition of the reluctance or inability of HCPs to use it, the final stages of action research in Phase 2 saw a fundamental rethinking of the role of the toolkit documentation in the intervention: the final iteration of PET is designed for use by facilitators rather than HCPs (Improvement Academy, 2018). Training and guidance will be provided to equip future facilitators with the skills and knowledge to work with HCPs to improve patient experience in busy health care environments, guided by a redesigned PET. Further testing would have to be carried out to see whether facilitators who have not been involved in PET's creation will be able to use it effectively, but this evaluation validates the decision to redesign PET for use by facilitators. In addition, the finding that staff and service pressures complicate the delivery of PET is relevant to any assessment of PET's feasibility in other health care settings. The greatest success in terms of improved patient experience is likely to be achieved when staff and service pressures are at a minimum. As such, PET's delivery may have to be timed for an appropriate occasion or wards and even organizations may have to be preselected to ensure a receptive context. Implementation would also benefit where multidisciplinary ward teams express an interest in using PET or organizational support is already in place. Controlling settings for PET's delivery in this way would free up the time of facilitators to concentrate on guiding ward teams through PET rather than have to navigate barriers to its delivery.

The view of the PET intervention that emerges from the evaluation is that of a complex intervention (Ling, 2012). The findings reinforce those of a recent study of toolkits, which warn against overstating their causal significance (Sharp et al., 2018). In this study, the action researchers' facilitation was not only expansive, but a key part of their role was to work around barriers to PET's delivery. Each ward took on a different path and success was achieved where facilitators could adapt PET to the ward setting. Context-sensitive facilitation strategies were deployed in response to the challenges and opportunities existing on the wards, including flexibility regarding the roles and responsibilities of ward team members and how QI techniques were applied. Greater emphasis was placed on the celebratory aspect of the toolkit for ward teams lacking in self-belief and efficacy. These techniques meant improvements were possible using PET despite difficult circumstances. But even where the action researchers and ward teams struggled in the face of significant staff and service pressures, the intervention still resulted in increased interest in improving patient experience among staff. For example, although Ward 5 had to end participation because all nonclinical time of staff was pulled locally by the trust in a period of severe winter pressures, plans were in place at the end of the project for the ward and local PE teams to continue working on patient experience once the pressures had lifted. These relationships had been forged through the project and can, therefore, be considered to be a soft, upstream outcome. All of this is consistent with efforts in intervention research to reframe interventions as "events in systems" (Hawe, 2015). Penny Hawe uses this metaphor to highlight the adaptive and emergent nature of complex interventions and the broader criteria that are required to evaluate them. Complex interventions, as events in systems, seek to improve system functioning. Preexisting contextual factors shape the form they take on and success requires that they strengthen or harness these factors (Hawe, 2015). The metaphor is useful to understand the complexity of the PET intervention and how success requires that it is adapted to context through a flexible facilitation function.

The findings, therefore, have wider implications for current debates in health care research and quality improvement. They add to the calls in favor of incorporating complexity concepts and theory

into the discipline (Hawe, 2015; Ling, 2012). Regarding the recent increase in the use of toolkits in health care research, the findings are ambivalent. PET Prototype 1 served a useful role in the study as a point of focus for the action research and the final PET iteration may serve as a mechanism of knowledge transfer to other health settings. But a clear implication of the study is that toolkits designed for use by HCPs in busy health care environments should be used sparingly; a more appropriate target audience may be facilitators. Finally, the findings confirm the utility of action research, both as a mode of inquiry and as a mechanism for implementation.

Indeed, the formative nature of action research allowed the PET intervention to adapt, with the action researchers' facilitation taking on a more central role than had been initially anticipated. That this was necessary is perhaps surprising given that PET Prototype 1 was created through a codesign process in Phase 1 involving the same HCPs, posing the question of why it had been designed for their use in the first place. Although the present evaluation did not evaluate Phase 1, a possible explanation is that the codesign sessions focused more on the specific stages within the toolkit rather than the fundamental question of whether a toolkit is appropriate or who would use it. It may also have been difficult for the designers and participants to envision what it would be like working with PET Prototype 1 in busy health care environments, as the sessions took place off-site in professional meeting venues. Nevertheless, the use of action research meant that the unrealistic assumptions of Phase 1 could be tested in practice in Phase 2, being revised accordingly once learning was acquired about the importance of an expansive facilitation role. This was possible because flexible facilitation is permitted in action research whereas experimental methodologies may have required that the action researchers minimize their input or standardize it across sites.

Besides driving the process of inquiry that permitted PET Prototype 1 to be revised significantly on implementation, action research "mechanisms" were found to be core enablers of PET and would, therefore, have to be replicated on its delivery elsewhere. The pivotal role of an expansive and adaptive facilitation role has already been discussed. It is interesting here to note that facilitation is increasingly being seen as vital to the delivery of complex interventions. The study confirms the capacity of facilitation to either adapt interventions to context or enhance the receptiveness of context to interventions (Harvey & Anderson, 2017; Pfadenhauer et al., 2017). A further core enabler was the participatory nature of action research which the findings reveal to have facilitated staff engagement and engendered a high-level of trust between the action researchers, HCPs, patient representatives and corporate staff, enabling often highly sensitive patient feedback to be discussed. Health care research and quality improvement are currently undergoing something of a paradigm shift away from experimental research toward participatory research and improvement techniques (Ramanadhan et al., 2018), which is congruent with this finding. That staff and service pressures were sometimes insurmountable, however, suggests that facilitation and participatory approaches have their limits, and are no panacea for a lack of staff time and resources. Policy makers and senior leaders would be well-advised to ensure that frontline services are appropriately resourced to allow staff time to deliver core services and engage in quality improvement work.

## **Conclusion**

The findings presented here, in the form of six inductively derived themes, suggest that the PET intervention (a combination of toolkit documentation and a flexible facilitation function) is an effective guide for facilitators working with HCPs to improve patient experience if implemented as part of a participatory improvement strategy. The findings prompt the question of how the expansive and highly adaptive facilitation provided by the action researchers during the project, as well as the participatory ethos of their approach, may be replicated to achieve success at scale. Yet, they also reveal limitations as to what facilitation and a participatory approach can achieve when

severe staff and service pressures are present. As such, PET's delivery may have to be timed for an appropriate occasion or wards and even organizations may have to be preselected to ensure a receptive context if the patient experience benefits arising from PET's use are to be maximized. Policy makers and senior leaders would be well-advised to ensure that staff have the time to engage in quality improvement work.

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