Implementing the PIE (Person, Interaction and Environment) programme to improve person-centred care for people with dementia admitted to hospital wards: a qualitative evaluation

Skingley, A., Godfrey, M., Henderson, R., Manley, K., Shannon, R. and Young, J.

ORIGINAL PRACTICE DEVELOPMENT AND RESEARCH

Implementing the PIE (Person, Interaction and Environment) programme to improve person-centred care for people with dementia admitted to hospital wards: a qualitative evaluation

Ann Skingley*, Mary Godfrey, Rosemary Henderson, Kim Manley, Rosie Shannon and John Young

*Corresponding author: Canterbury Christ Church University , Canterbury, England
Email: ann.skingley@canterbury.ac.uk

Abstract
Background: In the UK, improving person-centred care for people with dementia in hospitals is a policy priority. The PIE (Person, Interaction, Environment) programme comprises cycles of observation of care by staff, identification of areas for improvement and plans for practice change and evaluation.
Aim: To describe and evaluate PIE implementation in three UK NHS regions.
Methods: A qualitative design was adopted at 10 case study sites (wards), selected on the basis of readiness for change criteria. Following a training workshop, PIE cycles were introduced into each ward. Data collection comprised observation, interviews, documentary analysis and an events log. Normalisation process theory provided a guiding framework for analysis.
Results: PIE was fully adopted in two study wards over 18 months, which resulted in sustained practice change and increased awareness of person-centredness. Partial implementation of PIE took place in a further two wards but progress stalled before significant action. The remaining six wards did not implement the programme. Factors influencing the likelihood of implementation were: relevance of PIE; collective team involvement; fit with strategic priorities; adequate resourcing; effective clinical leadership; good facilitation; and organisational stability.
Conclusion: PIE has the potential to help staff improve person-centred care for people with dementia admitted to hospital wards. However, the evidence provided by this article is limited to 10 wards, of which only two fully implemented the programme.
Implications for practice:
- A programme for improving person-centred care for people with dementia in acute hospital wards requires sustained commitment from the ward and the wider organisation
- Successful practice change depends on multiple factors, including effective clinical leadership and good facilitation
- Contextual factors at various levels of an organisation need to be considered
- Use of the PIE tool has the potential to enable staff to focus on person-centred care for older people with dementia in acute settings

Keywords: Dementia, person-centred care, hospital wards, service improvement, normalisation process theory

Background

The ageing population has brought challenges for care services internationally (Amalberti et al., 2016; Hung et al., 2018). In the UK, around 42% of people aged over 70 who experience an unplanned hospital admission have dementia, and occupy some 25% of acute beds (Royal College of Psychiatrists 2019). Successive research reports have found that, despite pockets of excellent practice, there is unacceptable variation in the quality of care experienced by people with dementia in acute settings (Alzheimer's Society, 2009; Digby et al., 2016). This often results in a worsening of health, longer hospital stays and high numbers of patients being unable to return home and instead being admitted to long-term care (Mockford, 2015). A review of the Prime Minister's Dementia Challenge in 2020 noted that hospital care for people with dementia is still in need of improvement (Department of Health and Social Care, 2019).

In the light of these trends, improving care for people with dementia in general hospitals has become a policy priority in the UK. The National Dementia Strategy (Department of Health, 2009) covered 17 key objectives, including a need to improve the quality of care in general hospitals (in terms of person-centredness, addressing co-ordination of dementia care, training and leadership) and the availability of research evidence to guide change. Since then, the Prime Minister's Dementia Challenge (Department of Health, 2012; 2015), while highlighting progress, identified continuing requirements in terms of driving up standards of care, better research, and greater awareness of dementia and its impact in society in general.

Although there is a lack of consensus around the concept of person-centred care (Kogan et al., 2016), particularly in regard to people with dementia, the work of Kitwood (1997) has been influential in this respect. Kitwood proposed that wellbeing for people with dementia can be realised if psychological and relational needs and 'personhood' can be maintained. One initiative based on this concept is the PIE (Person, Interactions and Environment) observation method, which has the potential to improve the quality of person-centred care for people admitted to hospital with coexistent dementia.

PIE was developed as an audit tool for use in the first national audit of dementia in NHS hospital wards (Royal College of Psychiatrists, 2011) during a three-year research study (2008-2010). The audit, now in its fourth iteration (Royal College of Psychiatrists, 2019), has consistently found that aspects of dementia care, although improving, fail to reach acceptable standards.

PIE takes the form of a process that guides staff to undertake real-time observations of small numbers of patients, with an emphasis on three main areas:
- The extent to which staff are considering what is known about an individual patient as a *Person*, in order to tailor their care
- The quality of patient *Interactions* with staff
- The impact of the immediate modifiable physical *Environment* or organisation of care

Observation notes are then discussed within the staff team, and areas of good practice are identified collaboratively, as well as areas where care could be improved.

The PIE audit tool has subsequently been developed into a practice improvement programme, extending its ambit to enable the formulation of goals and achievable action plans, which are then implemented and reviewed. Further guidance was produced by the research team in collaboration with key hospital staff to describe the steps required to operationalise action plans. These include forming a PIE implementation team for each ward, agreeing which actions will be taken forward and communicated to staff, use of a workbook, holding a preparatory workshop and developing guidelines to review progress and identify barriers. The PIE tool has therefore been developed into a practice improvement process (Godfrey et al., 2018) comprising cycles of observation, reflection, planning, action and review (Figure 1).

Figure 1: PIE Cycle (Godfrey et al., 2018)
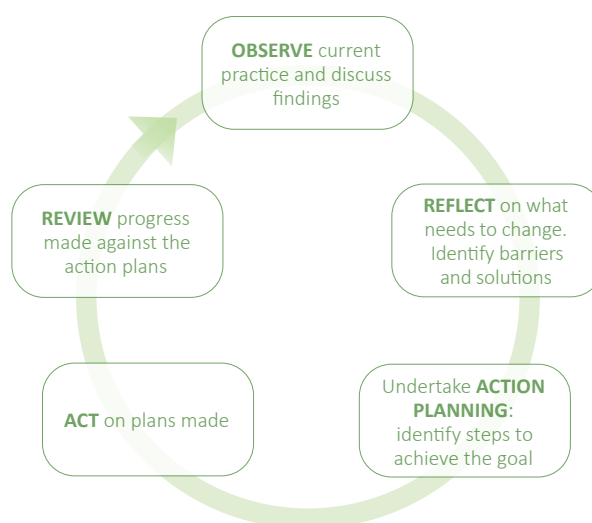
Since the use of PIE in the National Dementia Audit was limited to one-off use for audit, the extent to which it can be implemented as a programme in general hospital wards, and its effect on care delivery, is unclear. We therefore developed a research study to address these issues.

Methods
Design
A longitudinal, mixed-method design was adopted, incorporating multiple case studies. The case study format was chosen for its ability to investigate contemporary phenomena in depth and within a real-life context. It also deals with many variables, relies on multiple sources of evidence and often benefits from theoretical underpinning (Yin, 2009). Here, each case – or unit of analysis – consisted of a ward in an acute NHS hospital trust. The qualitative component of the mixed methods is reported here.

Sample and setting
Ten wards that each had a substantial proportion of older people with dementia among their patient intake were purposely selected, in five NHS hospital trusts in three English regions. The trusts varied in size and populations served. Criteria relating to 'readiness' to engage in a change process were identified before selection, informed by previous research on delirium prevention (Godfrey et al., 2013):

- Expressed interest among senior acute hospital staff in participating in the research to improve person-centred care for people with dementia
- Agreement of senior ward staff to engage in a practice improvement programme over a prolonged period
- Commitment from a clinical lead external to the ward with responsibility for practice development to assume a leadership role in initiating and facilitating PIE

Data collection
The process of PIE implementation, following a workshop delivered by the research team, was documented using the methods outlined in Box 1.

Box 1: Data collection methods

- Observation of PIE action planning and review meetings to provide a contemporaneous account of the intervention
- Informant conversations/interviews with implementation team members to explore how the programme was implemented using the tools and guidance and whether they were perceived as necessary and sufficient
- Collection and analysis of PIE documentation including observation, action planning and review tool
- Interviews with a sample of PIE team members at the conclusion of implementation to provide retrospective reflection on the process and impact of change
- A contemporaneous 'events' log maintained by researchers to capture change in policies, systems and procedures outwith PIE implementation that might affect the change process and outcomes. This included initiatives undertaken by trusts aimed at improving the care of people with dementia

---

Data analysis

Qualitative data drawn from interviews, workshop notes, observation of action planning and review meetings, and examination of completed documentation, were drawn together to provide a descriptive account of the engagement of staff with each step of the PIE cycle for each ward. Individual wards (cases) were then compared in a cross-case analysis (Yin, 2009) using normalisation process theory (NPT; May and Finch, 2009) as a sensitising framework. NPT proposes that complex interventions become routinely embedded (implemented and integrated) in an organisation and professional contexts as the result of people working individually and collectively, to implement them. Four generative mechanisms are put forward to explain how this is operationalised within routine care: coherence, cognitive participation, collective action and reflexive monitoring. New practices, the theory contends, become embedded when:

- The work that defines and organises a practice/intervention is understood as meaningful and invested in, in respect of the knowledge, skills, behaviours and actions required to implement it at an individual and collective level (*coherence*)
- The work is perceived as something worthwhile and appropriate, warranting commitment of individual time and effort to bring about the intended outcome (*cognitive participation*)
- Work practices and the division of labour through which these are carried out are modified or adapted to incorporate the change/intervention into the social system of the host organisation (*collective action*)
- Those engaged appraise the effects as attributable to the intervention and congruent with valued goals (*reflexive monitoring*)

Analysis drew on May and colleagues' (2015) suggestion that NPT can be used as a sensitising device, to direct thinking in a structured way. It also drew on the 2005 review by Fixsen and colleagues of implementation research, which identifies distinct implementation stages: exploration and adoption; programme installation; initial implementation; full adoption; innovation; and sustainability (Box 2).

Box 2: Stages of Implementation (Fixsen et al., 2005)

Exploration and adoption: making a decision on whether to proceed based on the match between the needs of the organisation, assessment of the intervention as relevant and the resources required to carry it through

Programme installation: active preparation to begin implementation, for example introducing the programme to staff, recruiting people to lead the work, and organising training

Initial implementation: first steps in making change happen. Typically a challenging period when confidence in the decision to adopt is being tested and the implications of the resource investment are becoming evident

Full adoption: the programme becomes fully operational

Innovation: the period during which the programme is being refined and expanded; desirable changes are being considered for inclusion as part of routine practices

Sustainability: the goal at this stage is long-term survival of the practices introduced

---

To minimise bias, analysis of qualitative data was conducted manually, separately and collectively by members of the research team (AS, MG, RH, RS). This was done at regular time intervals to compare emerging findings across the case study wards.

Ethics
Ethical approval for the study was obtained from national research ethics committee for Yorkshire and The Humber. Written, informed consent was sought from healthcare staff who were interviewed, or who took part in the observed PIE meetings. Data were pseudonymised and personal data deleted from trust and ward documentation where appropriate.

Findings
All sites participated in exploration (Fixsen et al. 2015, first stage) and met the 'readiness' criteria, achieved through meetings, a willingness to invest resources and providing signed agreement. However, not all wards proceeded to full PIE adoption. A distinction was made between full implementers, partial implementers and non-implementers. Full implementer wards pursued implementation over 18 months broadly as intended (two wards within a single trust). Partial implementers made some progress but did not persist to full adoption (two wards in different trusts). Non-implementers were either lost early on following programme installation (three wards in one trust) or did not begin installation (three wards in two trusts). Trusts and wards have been given pseudonyms to maintain confidentiality (see Table 1).

Table 1: Pattern of variation in PIE implementation		
Full implemeters	**Partial implemeters**	**Non-implemeters**
Seaford Trust Poplar, 22 beds Orthopaedic ward Crane, 26 beds Frailty ward	**City Trust** Rivermead, 27 beds Step-down rehab ward **Ironbridge Trust** Netherton, 27 beds Acute medical ward for patients with dementia	**Central Trust** Beech, 24 beds Older people/orthopaedic ward Rose, 23 beds Stroke unit Denton, 13 beds Enhanced recovery ward for patients with dementia **City Trust** Cedar, 28 beds Orthopaedic ward **Valley Trust** Ambridge, 30 beds Care of older people Oak, 28 beds Orthopaedic ward

On most wards, the prevalence of dementia was between one-third and half of patients. For the dementia-oriented wards (Netherton and Denton), this figure was close to 100%.

This article first describes the progress of each site in the light of the stages of implementation, set out in Box 2 above. It then compares implementation processes across settings to discern generalisable features that could account for variation and identify factors conducive to full implementation (cross-case analysis).

Full implementers

Exploration to programme installation

The last organisation to be recruited to the research, Seaford Trust, engaged encouragingly with the idea of PIE, with good workshop attendance at each of its two sites. The PIE implementation team on Poplar ward comprised nursing and care staff (practice development facilitator, dementia nurse specialist, senior ward nurse, staff nurses, healthcare assistants and therapy assistant). Joint leadership was assumed by the practice development facilitator and the dementia nurse. Both were external to the routine ward work and had a developmental role in relation to staff on it. Although the ward manager was not formally a team member, she provided active support, facilitation and encouragement.

On Crane ward, membership of the PIE team included the lead dementia nurse specialist, senior occupational therapist, occupational therapist (all external to the ward team), two therapy assistants, ward manager and ward sister. At the outset, there was no direct involvement of frontline nursing and care staff, although senior staff actively encouraged their participation.

Programme installation to initial implementation

The first PIE cycle on Poplar began after the introductory workshop. Five team members, working in pairs, conducted a total of five hours of observation at different times of the day, including a weekend, in blocks of around an hour. Researcher's notes from staff feedback showed that both observers and observed initially felt 'out of their comfort zone'. Observers found it difficult to look without acting, and the staff being observed were wary. PIE observation notes showed both good and suboptimal care practices:

> *10.50am: GT has a visitor. Interacting, smiling and looking at pictures.*

> *11.20am: Student nurse tidies room, places drink within reach. However, no interaction with patient.*

Initial implementation on Crane followed behind Poplar after two months. PIE was slower in getting off the ground on Crane, which in part reflected situational factors such as changes in ward leadership. A new ward manager with a practice development background had recently been appointed. A well-attended second workshop was held, which generated renewed enthusiasm. Leadership and responsibility were assumed by the lead specialist dementia nurse. For the first cycle, there were four sets of observations, each an hour long, typically conducted by staff in pairs at different times and in different spaces. As on Poplar, observations revealed variations in care quality:

> *2.35pm: Student returns: 'Martha [not real name] would you like more tea?' Assists patient to drink. 'You're doing really well' (encouraging). Wipes mouth. 'You're struggling, aren't you?' Then 'fantastic, well done'.*

> *09.25: Patient asleep in bed, radio on loudly next to him … a lot of noise coming from resource room. Ward as a whole is noisy – feeling quite stressful.*

Initial implementation to full adoption

Moving forward from conducting observations on Poplar was not without challenges, since the team found it difficult to identify convenient meeting times. Further hindrances came with a temporary ward move due to refurbishment. In addition, an imminent Care Quality Commission site visit absorbed staff energy.

The first action plan on Poplar established areas to work on: communication, nutrition and activities. In response to observations indicating inconsistency in nurse-patient interaction and little interaction between patients, an initial action plan focused around mealtimes as a social event. Starting in a

single bay, patients were encouraged to sit around a table for lunch. This set in train work addressing several goals, beginning with small steps and subsequently expanded to all bays through the process of appraisal and review (including new observations). This initiative also contributed to the goal of patient mobilisation, getting people up and moving between bed and tables. Interview data revealed that staff viewed this positively:

> 'We found that sitting them up at the table, a patient that maybe didn't talk, didn't eat, all of a sudden, with other patients that maybe haven't got delirium or dementia, they've actually sat there, they've spoke and they've actually eaten. We have found that's really a big, big thing' (Interview with healthcare assistant).

Implementation on Crane began in earnest following the second workshop. Observation about noise from the radio resulted in a plan to elicit patient preferences about music on the ward. This moved on to establishing music as a collective and purposeful activity at lunchtime and then extended to plans for a regular monthly singing session, as patients appeared to derive pleasure from joining in. As on Poplar, a small step at one level led to a significant change in how things were usually done, with space and momentum created through the action planning and review process. Again, impressions were positive:

> 'The environment is better I think, they certainly have looked at the radios because they did used to put the radios on and it was just going, but that's not happening as much now' (Interview with occupational therapist).

Full adoption toward sustainability
PIE observations on Poplar continued periodically throughout the research. The experience of doing observation reinforced its value to 'see' action and interaction in a different way:

> 'It's allowed us to step back and look at what we're doing. 'Cos when we're right in the middle of it, it's all quite difficult, seeing what's going on and what you should be doing' (Interview with staff nurse).

New issues identified resulted in new action plans, including ensuring that patients did not feel isolated or ignored – for example, not leaving curtains closed around patients after care delivery, not excluding patients within earshot from discussions, and regular checking that clocks in the bays were accurate.

A focus of action planning was providing stimulating activities for patients who were well enough to take part, including newspapers, games, and reminiscence resources like RemPods™. By the end of the third improvement cycle, observations indicated positive change: staff sitting with patients and encouraging them to read, and using pictures as conversation prompts. These action plans were evaluated as 'partially met'. Engagement was constrained by staff availability, which waxed and waned depending on demand, patient flow and unpredictable levels of patient acuity.

Over time, the composition of the PIE ward team changed. Although never formally a team member, the ward manager played a crucial enabling role in supporting staff to get involved in PIE and in facilitating communication of action plans to the wider staff group.

On Crane, alongside 'music as stimulating activity', which expanded over time, new action plans were pursued. These included encouraging patients who were well enough and near to discharge to dress in their own clothes during the day, which was not usual on this ward. This was seen as supporting the transition from hospital to home, and was also aimed at nursing, care and therapy staff to increase person-focused interaction while they helped the person choose their clothes and get dressed. Making this happen involved negotiating with relatives to bring in clothing and ensuring staff did the work.

Four PIE cycles were completed on Crane, although in practice, as on Poplar, the interplay of observation-planning-action-review represented a spiral more than a cycle, since learning and practice were continually being built on. Subsequent observations were shorter (around 30 minutes) to make the process manageable. As on Poplar, investment of staff time was an ongoing issue, particularly when experiencing winter pressures, when the team had to cover an additional six beds. The cramped nature of the environment and lack of patient space outside the bays was a constraint. Engagement in activities was assessed as being 'partially implemented'. Similarly to Poplar, the composition of the PIE team changed as therapist posts rotated, and there was less engagement by frontline staff on Crane than on Poplar.

A significant collaborative event, a cross-site workshop for Poplar and Crane, was held a year after PIE introduction, instigated by Poplar. Ten staff across both wards took part, including the trust's dementia specialist nurse and the researcher (AS). The meeting allowed both teams to clarify how person-centred care was conceived. A statement of purpose was agreed:

> *Both staff and patients feeling valued and treated as individuals, while promoting independence, holistic and effective care, choice and high-quality experience.*

The meeting provided an opportunity for reflection on what was needed. There was considerable enthusiasm about being part of a process that actively involved staff on the front line in effecting change, and which encouraged them to use their initiative to try out ideas. They perceived a change in practice: increased use of the patient biographical tool, *This is me*® booklet (Alzheimer's Society, 2017); greater involvement with patients' families; and heightened awareness of patient experience as the centre of what they did. Concerns centred on time constraints, how to sustain PIE after the research ended and how to embed changes in routine practice. Issues to pursue included incorporating PIE information into routine staff induction and all new ward staff undertaking a short PIE observation with a link PIE team member.

Explicit links were made between the PIE objective of enhancing person-centred care and the trust's shared purpose framework (Manley et al., 2014). The role played by the dementia specialist team in championing PIE, which was critical, was also perceived as a vehicle through which aspects of the dementia strategy could be pursued. Both operated in synergy.

Partial implementers
Exploration to programme installation
On Netherton ward, the introductory meeting revealed a passionate commitment to improving care delivery for their patients, directorate-level support for the research and interest among the training and practice development team to assist with PIE. The PIE workshop was attended by seven staff, in various roles and at different levels of seniority (manager and charge nurse, staff nurses, healthcare assistants and an occupational therapist attached to the ward). They formed the PIE team. Training and practice development staff also took part to support implementation. Feedback on the workshop was very positive and ward staff indicated willingness and enthusiasm to get going.

Rivermead ward also had a long-established and cohesive team. The ward manager was very supportive of improving care of people with dementia on her ward, and had worked closely with the practice development lead; both had a particular interest in dementia care. A total of nine staff attended the PIE workshop (two sisters, two staff nurses, three healthcare assistants, a housekeeper and therapy assistant). This reflected engagement and interest across the staff group working in a variety of roles. At the conclusion of the workshops, both wards had plans under way for PIE installation and PIE teams, and had identified support outside the wards.

Initial implementation

Following the initiating workshop on Netherton, the first cycle began with observations by the ward's PIE team. Observations were conducted over a two-hour period in pairs on two occasions, at different times of the day (mid-morning and afternoon). The observers initially felt inhibited and anxious, concerned that staff might act differently knowing they were being observed.

Observations indicated positive features of practice (responsive and reassuring with anxious patients; encouraging interaction between patients; and offering food and drink choices and getting them straight away). The ward was clean and warm, patients who were in bed appeared content and others were up and about in the day room and corridor. Immediate feedback was provided to staff on shift and welcomed by them as acknowledging the strength of teamworking. The value of observation in 'seeing' things in a different way was emphasised by the observers. Further observations were planned for different times of the day and night to see whether care was consistent across shifts.

Immediate action was initiated from these observations. This included the introduction of staggered staff breaks in the morning (no more than two at a time) to ensure responsiveness during a period when staff were relatively invisible in the bays (observed as buzzers going unanswered, and patients being left waiting longer than usual for assistance). Another action point was addressing the temperature of the ward for patients who were inactive, by offering extra blankets; staff constantly in motion would be less likely to notice if it was cold.

Over the following three months, further sets of observations occurred involving all seven PIE team members and the practice development co-ordinator. Apart from individual instances (for example, a dozing patient not being offered a drink), observation elicited a picture of responsive practice. However, the additional support anticipated from staff at directorate level did not transpire.

A meeting was held to discuss action plans. However, a number of factors resulted in a lack of follow-through. Senior staff were preoccupied with what they perceived as increased patient acuity, a push from managers to speed patient flow and concerns around staffing. Four months on, progress had stalled. The researcher observed that staff appeared stressed by simply trying to maintain responsive care, amid NHS winter pressures and staffing shortages, leaving little headroom for initiating practice change.

On Rivermead ward, three months elapsed between the introductory workshop and the first set of observations. Three pairs of staff (three healthcare assistants, a housekeeper, nurse and ward manager) carried these out over two-hour periods covering early afternoon, teatime and late evening. Reflections on observations occurred informally afterwards. Despite the number, range and length of observations, documentation revealed a relatively superficial portrayal of practice and goals for improvement, largely related to professional 'visitors' to the ward (pharmacists, phlebotomists, porters and medical staff). Feedback with the researcher revealed that observers had noted little interaction between staff and patients for long periods in the evening, but this was interpreted as highlighting a need for additional staff and therefore did not feature as a goal for change. The existence of the problem was uncontested; their judgement that they were powerless to act on it affected its utility as a focus of action planning.

Initial implementation took place amid organisational turbulence, as the trust responded to a critical Care Quality Commission report. This absorbed the energy of the key facilitator (now matron) at a time when the ward manager was off sick. Ward staff were working day to day, still coping with extra patients as the winter pressure beds remained open. The offer of an extra workshop was not taken up, since staff could not be spared to attend. It wasn't until several months later that the key facilitator was able to hold an action planning meeting, but the time lapse since observations, together with work pressures, staff sickness and vacancies made further PIE work unrealistic.

Non-implementers

In contrast with 'partial implementers', these six wards did not proceed far with PIE installation and fell at the hurdle of initial implementation. Rose, Beech and Denton wards in Central Trust are more accurately characterised as between partial and non-implementers, and are considered together as the same factors apply to all three. Ambridge and Oak wards (in Valley Trust) and Cedar ward (City Trust) were unambiguous non-implementers and did not engage with PIE at any meaningful level.

Exploration

The three wards in Central Trust worked closely together, with the Denton ward manager strongly supportive of PIE, organising and facilitating joint workshops and encouraging Rose and Beech wards. At the time of the research, however, the trust was undergoing organisational turbulence as services were reconfigured, which proved inimical to practice change and development. While practice observations took place on Beech and Rose wards, there was no follow-up activity as staff coped with changes that finally saw the transition of Beech from an acute ward to a step-down ward, and the eventual closure of both Rose and Denton wards.

In the two Valley Trust wards, the departure during baseline fieldwork of the practice development lead, who was to act as 'external' facilitator, coupled with staffing pressures on both meant that neither ward was deemed suitable for PIE at that time. Of several workshops planned to introduce PIE only one took place; two others were cancelled when it became clear staff would be unable to attend. Attempts to reignite interest over several months were unsuccessful.

Cedar ward similarly did not take part in PIE. Demand pressures and organisational change at City Trust (which also impacted on Rivermead) affected Cedar directly. In addition, the ward manager was focused on creating a team ethos in context of a new ward model and staff group. Reflecting on the decision to take part in the research, she considered it had underestimated the level of work involved in forging a new team alongside demand pressures – the timing had not been right.

Cross-case analysis and discussion

The PIE programme was fully adopted in only two of the 10 case study wards (both based in the Seaford Trust), where it proceeded to innovation and sustainability. A cross-case analysis, undertaken to explore why these wards adopted PIE while others did so only partially or not at all, highlighted a number of influential factors: the relevance of PIE, collective team involvement, fit with strategic priorities, resources, leadership, facilitation and organisational stability. These factors are discussed in turn using normalisation process theory (NPT) to assist analysis.

Relevance of PIE

It is accepted that in order to effect practice change, education and awareness-raising alone are not enough (Handley et al., 2017). Rather, in terms of NPT, a change has to be seen as meaningful and engendering coherence. In both wards in the Seaford Trust, the process of PIE implementation engendered confidence, collaboration, a sense of empowerment and agency among the staff group in trying out new ways of working. Positive change was visible and in turn acted as a spur to maintain efforts.

Among partial implementers, PIE was embraced enthusiastically at the outset. On Netherton ward, observation reinforced pride among the staff team of the general quality of care they provided. But translating observations into action plans that addressed valued goals proved more difficult. Although not articulated in the beginning, observations reinforced and solidified the primary goal of senior staff to improve patient care through reduction in the size of the ward and allocating more staff time to providing stimulating activities. However, neither was seen as an action that could be pursued through PIE, since they required significant resource commitment. This poses the question: is there a quality 'ceiling' effect in terms of a 'person-focused' approach within the constraints of acute care delivery?

Additionally, within this ward, there was already a sound team culture, as well as routine systems and mechanisms to engage in deliberative practice reflection to secure quality improvement. So, apart from observation, the additional work of PIE seemed superfluous.

Enthusiasm and interest in improving practice also required supportive environments to sustain belief in staff agency to effect change so that investment of time and resources was seen as worthwhile. Demand pressures and organisational uncertainty dampened both, evident not only in Rivermead but in all three Central Trust wards.

Collective team involvement
The degree of success of any group initiative relies on teamwork (Dixon-Woods et al., 2014), which for PIE very much depended on the implementation teams created within the wards. Attending the workshop, then undertaking the cycles of observation, planning, action and review required the teams in Seaford Trust to identify themselves with the project aims and commit time to them, which necessitated agreed ways of communicating and working together – the NPT construct of cognitive participation. A good example of the outworking of this construct in Seaford was the meeting between the two participating wards, which allowed time to clarify values and aims. For the partial implementers, Netherton ward demonstrated a collective enthusiasm for PIE, moving in a timely manner like the Seaford wards to planning soon after the workshop and devoting an awayday to reflecting on this. Conversely, Rivermead ward experienced long delays between workshops and observations, suggesting less cohesive participation.

Fit with strategic priorities
PIE was not the only initiative aimed at improving the care of people with dementia under way in participating trusts. The challenge lay in introducing these at a time when numerous directives were simultaneously being handed down. At Seaford, the team of three dementia nurse specialists worked directly with ward staff to model good practice in dementia care and provide support and education, but also engaged in the trust-level organisational changes, for example developing dementia pathways. From the outset, the specialists embraced PIE as one vehicle through which to develop practice change and drive the collective action that NPT identifies. In this way, PIE and the trust's dementia strategy worked synergistically and were a good fit with the Seaford's new shared purpose framework.

In other trusts (City and Ironbridge), the creation of dementia champion roles aimed to raise awareness and set up training for staff at all levels. However, the way the recruitment of these champions would translate into a means of changing practice at ward level was not clear. At City, the matron who had supported PIE envisioned that the champions initiative would feed into the use of PIE at ward level – a vision not necessarily shared among those involved in developing the dementia strategy. For staff on Netherton, the champions initiative appeared diffuse and lacking in depth and impact. Further, as its initial focus was on raising general awareness of dementia, this was not seen to address staff perception of the problem, namely how they were to be provided with the skills necessary to work with challenging patients and with the participative approaches required to enable sustained implementation of PIE.

Resources
Implementing quality improvement initiatives in the NHS requires adequate resources (Dixon-Woods et al., 2014; Handley et al., 2017) in terms of staffing, time, and space to reflect, plan and engage in reflexive monitoring, the final stage of NPT. Apart from Netherton and Denton (dementia wards), on most wards there was limited or no collective space for activities or interaction, and finding time and space for action planning and review meetings was problematical. When this did occur, notably with Seaford's cross-site meeting and Netherton's awaydays, it allowed for discussions around person-centred care and what that meant in their own contexts. Similarly, for both these wards, staff expressed that time spent undertaking PIE observations allowed them to stand back and see things differently.

A further issue was staffing levels; three of the 10 wards did not attain the Royal College of Nursing's recommended staff-patient ratio for safe working on older people's wards (Hayes and Ball, 2012), namely eight staff for 28 beds, a ratio of 1:3.5. Most did not meet the recommended ratio of registered nurses to healthcare assistants of 65:35. Although most wards were subject to staff being removed to cover absence on other wards, Seaford Trust's staffing levels were comparatively better suited to the needs of patients with dementia than those of other trusts.

Leadership
Leadership was identified as a 'readiness criterion' for practice change and is supported in the literature (Ferlie and Shortell, 2001; Dixon-Woods et al., 2014). This applies to workplace culture as well as organisational culture (Manley et al., 2019). On implementation wards leadership took the form of key individuals beyond the ward whose professional authority and vertical networks legitimated the priority attached to the work of improvement in the face of competing priorities. At Seaford Trust, this role was adopted by the dementia specialist nurses (jointly with the practice development lead on Poplar). This did not happen on other wards; although external practice development leads were also originally involved on the wards that partially implemented PIE, this did not continue. On Netherton, the ward manager assumed the PIE leadership role but only partially enacted it, and participation of the external facilitator, who had helped with observations, was not called on to assist in driving subsequent action-planning processes. On Rivermead, the external facilitator became involved in the restructuring caused by the Care Quality Commission's criticism, leaving no time to devote to the PIE programme. There was a similar lack of an external driver on non-implementing wards; at Valley Trust, for example, the senior nurse for older people, initially designated for this role, moved to another post early on in the research and no replacement could be found.

Facilitation
Wards that fully implemented PIE had involvement of senior ward staff, in the person of the ward managers, facilitating and encouraging direct involvement in the change process and in ensuring planned changes were communicated to the wider staff team. However, the conception of 'facilitation' in this study differs from that projected in some frameworks for implementing change, for example PARiHS (Rycroft-Malone et al., 2002) and practice development (McCance et al., 2013), both of which place the emphasis on skilled, holistic facilitation in effecting change. In this research, the ward manager, integrating leadership with facilitation, did not 'drive' implementation but played a critical role in enabling the ward team. The need for this integration of facilitation and leadership for practice development is echoed in the Venus model of workplace transformation (Manley and Jackson, 2020).

On both Poplar and Crane wards, the ward managers were fully supportive of PIE, encouraging observations and allowing time for reflection, action planning and, where time permitted, joining the meetings themselves. On the partial-implementation wards this involvement did not happen; the Rivermead manager was off sick during the project period, while the Netherton manager attempted to be the facilitator but found it too much to take on. Denton ward, which did not implement PIE, had a similar experience with a supportive ward manager who had no external facilitator to work with. On Cedar ward, a late entrant to the project, the ward manager was fully absorbed in creating a new team within a freshly created model of care.

Organisational stability
Collective action is also dependent on the wider system in which individuals and teams function (Ferlie and Shortell, 2001). Although all participating wards experienced change at multiple contextual levels, the degree of turbulence varied between trusts. While Seaford experienced changes as a result of a critical Care Quality Commission inspection report (although its dementia care was praised), these did not appear to percolate down to ward level or adversely impact on PIE. Other sites encountered greater turbulence; Central Trust was particularly affected by reorganisation, which saw two participating wards closed during the course of the research and the third undergo remodelling. Rivermead ward, a partial implementer, also closed as part of a major restructuring in City Trust over this time.

Conclusions and critique of the method

Seven factors have been suggested as influential in the implementation of the PIE programme, which can be partially aligned with the four stages of NPT. However, NPT as a theory, while acknowledging contextual factors, is located within a sociological context that assumes individual and collective agency in any given situation. Three further factors (leadership, facilitation and organisational stability) were also found to be crucial to success, suggesting NPT may be viewed as providing necessary, but not sufficient conditions to explain outcomes. Further, the notion that practices become 'routine' may be critiqued, as in the dominant nursing discourse of the 1970s and 1980s when 'routine care' was thought to imply ritualised and mechanical practices, anathema to individualised care (Hutchinson and Jackson, 2015).

Findings from this research suggest the PIE programme has the potential to help staff improve person-centred care for people with dementia who are admitted to hospital wards. Though evidence is drawn from 10 wards, only two fully implemented the programme due largely to organisational factors found to impact on progress. Conclusions must therefore remain tentative but the effect of the constraining factors in partially and non-implementing wards may add weight to the findings. A further limiting factor is the limited time frame over which PIE was studied, and evidence suggests sustainability was challenging even for the wards that fully implemented the programme (Skingley and Marshall, 2018). This and other dimensions of PIE, such as patient-related outcome measures, may be the focus of future research.

Implications for practice

- Developing person-centred care practices for people with dementia in acute hospital wards via a practice improvement process such as PIE requires meaningful commitment and participation from the ward and the wider organisation
- Successful practice change depends on several key factors, including effective clinical leadership and good facilitation inside and outside the ward. External facilitation is necessary to help prioritise the programme and place it in harmony with wider trust objectives
- In addition to these key elements, readiness criteria for implementing a PIE programme should consider contextual factors, including institutional stability and whether any major changes are planned for participating wards
- Observations of practice using the PIE tool have the potential to enable staff's attention to focus on person-centred care for older people with dementia in acute settings

References

Alzheimer's Society (2009) *Counting the Cost: Caring For People with Dementia on Hospital Wards*. London: Alzheimer's Society. Retrieved from: tinyurl.com/AS-counting. (Last accessed 12th November 2020).

Alzheimer's Society (2017) *This is Me*. London: Alzheimer's Society/Royal College of Nursing. Retrieved from: tinyurl.com/ASRCN-thisisme. (Last accessed 23rd December 2020).

Amalberti, R., Nicklin, W. and Braithwaite, J. (2016) Preparing national health systems to cope with the impending tsunami of ageing and its associated complexities: towards more sustainable health care. *International Journal of Quality in Health Care*. Vol. 28. No. 3. pp 412-414. https://doi.org/10.1093/intqhc/mzw021.

Department of Health (2009) *Living Well with Dementia: A National Dementia Strategy*. Leeds: Department of Health. Retrieved from: tinyurl.com/DoH-living-well. (Last accessed 12th November 2020).

Department of Health (2012) *Prime Minister's Challenge on Dementia*. London: Department of Health. Retrieved from: tinyurl.com/PMs-dementia. (Last accessed 12th November 2020).

Department of Health (2015) *Prime Minister's Challenge on Dementia 2020*. London: Department of Health. Retrieved from: tinyurl.com/PMs-dementia2020. (Last accessed 12th November 2020).

Department of Health and Social Care (2019) *Dementia 2020 Challenge: 2018 Review Phase 1*. London: Department of Health and Social Care. Retrieved from: tinyurl.com/DHSC-dementia2020-review1. (Last accessed 12th November 2020).

Digby, R., Lee, S. and Williams, A. (2016) The experiences of people with dementia and nurses in hospital: an integrative review. *Journal of Clinical Nursing*. Vol. 26. Nos. 9-10. pp 1152-1171. https://doi.org/10.1111/jocn.13429.

Dixon-Woods, M., Baker, R., Charles, K., Dawson, J., Jerzembek, G., Martin, G., McCarthy, I., McKee, L., Minion, J., Ozieranski, P., Willars, J., Wilkie, P. and West, M. (2014) Culture and behaviour in the English National Health Service: overview of lessons from a large multimethod study. *BMJ Quality and Safety*. Vol. 23. No. 2. pp 106-115. Retrieved from: tinyurl.com/Dixon-NHS-culture. (Last accessed 13th November 2020).

Ferlie, E. and Shortell, S. (2001) Improving the quality of health care in the United Kingdom and the United States: a framework for change. *The Milbank Quarterly*. Vol. 79. No. 2. pp 281-315. https://doi.org/10.1111/1468-0009.00206.

Fixsen, D., Naoom, S., Blasé, K., Friedman, R. and Wallace, F. (2005) *Implementation Research: A Synthesis of the Literature*. Tampa, US: Florida Mental Health Institute.

Godfrey, M., Smith, J., Green, J., Cheater, F., Inouye, S. and Young, J. (2013) Developing and implementing an integrated delirium prevention system of care: a theory-driven, participatory research study. *BMC Health Services Research*. Vol. 13. Article 341. https://doi.org/10.1186/1472-6963-13-341.

Godfrey, M., Young, J., Shannon, R., Skingley, A., Woolley, R., Arrojo, F., Brooker, D., Manley, K. and Surr, C. (2018) The Person, Interactions and Environment programme to improve care of people with dementia in hospital: a multisite study. *Health Services and Delivery Research*. Vol. 6. No. 23. Retrieved from: ncbi.nlm.nih.gov/books/NBK508098/. (Last accessed 3rd May, 2021).

Handley, M., Bunn, F. and Goodman, C. (2017) Dementia-friendly interventions to improve the care of people living with dementia admitted to hospitals: a realist review. *BMJ Open*. Vol. 7. No. 7. e015257. https://doi.org/10.1136/bmjopen-2016-015257.

Hayes, N. and Ball, J. (2012) Achieving safe staffing for older people in hospital. *Nursing Older People*. Vol. 24. No. 4. pp 20-24. https://doi.org/10.7748/nop2012.05.24.4.20.c9069.

Hung, L., Phinney, A., Chaudhury, H., Rodney, P., Tabamo, J. and Bohl, D. (2018) Appreciative inquiry: bridging research and practice in a hospital setting. *International Journal of Qualitative Methods*. Vol. 17. No. 1. pp 1–10 https://doi.org/10.1177/1609406918769444.

Hutchinson, M. and Jackson, D. (2015) Intentional rounding: unpacking the ritual, routine and evidence impasse. *Journal of Clinical Nursing*. Vol. 25. Nos. 1-2. pp 5-7. https://doi.org/10.1111/jocn.13065.

Kitwood, T. (1997) *Dementia Reconsidered: The Person Comes First*. Buckingham and Philadelphia: Open University Press.

Kogan, A., Wilber, K. and Mosqueda, L. (2015) Person-centred care for older adults with chronic conditions and functional impairment: a systematic literature review. *Journal of the American Geriatrics Society*. Vol. 64. No. 1. pp e1-e7. https://doi.org/10.1111/jgs.13873

Manley, K., O'Keefe, H., Jackson, C., Pearce, J. and Smith, S. (2014) A shared purpose framework to deliver person-centred, safe and effective care: organisational transformation using practice development methodology. *International Practice Development Journal*. Vol. 4. No. 1. Article 2. pp 1-31. Retrieved from: fons.org/library/journal/volume4-issue1/article2. (Last accessed 3rd May 2021).

Manley, K., Jackson, C. and McKenzie, C. (2019) Microsystems culture change: a refined theory for developing person-centred, safe and effective workplaces based on strategies that embed a safety culture. *International Practice Development Journal*. Vol. 9. No. 2. Article 4. pp 1-21. https://doi.org/10.19043/ipdj.92.004.

Manley, K. and Jackson, C. (2020) The Venus model for integrating practitioner-led workforce transformation and complex change across the health care system. *Journal of Evaluation in Clinical Practice*. Vol. 26. No. 2. pp 622-634. https://doi.org/10.1111/jep.13377.

McCance, T., Gribben., B., McCormack, B. and Laird, E. (2013) Promoting person-centred practice within acute care: the impact of culture and context on a facilitated practice development programme. *International Practice Development Journal*. Vol. 3. No. 1. Article 2. pp 1-17. Retrieved from: fons.org/library/journal/volume3-issue1/article2. (Last accessed 13th November 2020).

May, C. and Finch, T. (2009) Implementing, embedding and integrating practices: an outline of normalization process theory. *Sociology*. Vol. 43. No. 3. pp 535-554. https://doi.org/10.1177/0038038509103208.

May, C., Rapley, T., Mair, F., Treweek, S., Murray, E., Ballini, L., Macfarlane, A., Girling, M. and Finch, T. (2015) *Normalization Process Theory Online Users' Manual, Toolkit and NoMAD Instrument*. Retrieved from: tinyurl.com/NPT-how-to. (Last accessed 5th April 2021).

Mockford, C. (2015) A review of family carers' experiences of hospital discharge for people with dementia and the rationale for involving service users in health research. *Journal of Healthcare Leadership*. vol. 7. pp 21-28. https://doi.org/10.2147/JHL.S70020.

Royal College of Psychiatrists (2011) *Report of the National Audit of Dementia Care in General Hospitals*. London: Royal College of Psychiatrists. Retrieved from: tinyurl.com/RCP-audit-dementia. (Last accessed 13th November 2020).

Royal College of Psychiatrists (2019) *National Audit of Dementia Care in General Hospitals 2018-2019. Round Four Audit Report*. London: Royal College of Psychiatrists. Retrieved from: tinyurl.com/RCP-audit-dementiaR4. (Last accessed 16th November 2020).

Rycroft-Malone, J., Kitson, A., Harvey, G., McCormack, B., Seers, K., Titchen, A. and Estabrooks, C. (2002) Ingredients for change: revisiting a conceptual framework. *BMJ Quality and Safety*. Vol. 11. No. 11. pp 174-180. Retrieved from: tinyurl.com/Rycroft-IfC. (Last accessed 13th November 2020).

Skingley, A. and Marshall, J. (2018) Challenges of implementing and embedding a programme to improve care for older people with dementia in hospital wards. *Nursing Older People*. Vol. 30. No. 4. pp 29-33. https://doi.org/10.7748/nop.2018.e1120.

Yin, R. (2009) *Case Study Research: Design and Methods*. (4th edition). London: Sage.

Ann Skingley (PhD, MSc, BA), Principal Research Fellow, Sidney De Haan Research Centre for Arts and Health, Canterbury Christ Church University, Canterbury, England.

Mary Godfrey (MPhil, BA), Previously: Reader in Health and Social Care, Leeds Institute of Health Sciences, Leeds, England.

Rosemary Henderson (nee Woolley) (MSc, BSc), Clinical Research Officer, Fieldhead Hospital, Wakefield, England.

Kim Manley CBE (PhD, MN, BSc), Professor of Practice Development, University of East Anglia, Norwich, England; Emeritus Professor, Canterbury Christ Church University, Canterbury, England.

Rosie Shannon (MSc, BSc), Research Fellow, Academic Unit for Ageing and Stroke Research, Bradford Royal Infirmary, Bradford, England.

John Young (MBA, MBBS, MSc, FRCP), Emeritus Professor of Elderly Care Medicine, Academic Unit for Ageing and Stroke Research, Bradford Royal Infirmary, Bradford, England.