

# A multi-site evaluation of the Person, Interactions & Environment (PIE) tool to improve person-centred care for people with dementia admitted to acute hospital wards

<https://www.neurodegenerationresearch.eu/survey/a-multi-site-evaluation-of-the-person-interactions-environment-pie-tool-to-improve-person-centred-care-for-people-with-dementia-admitted-to-acute-hospital-wards/>

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### **Country**

United Kingdom

## **Title of project or programme**

A multi-site evaluation of the Person, Interactions & Environment (PIE) tool to improve person-centred care for people with dementia admitted to acute hospital wards

## **Source of funding information**

NIHR

## **Total sum awarded (Euro)**

€ 601,565

## **Start date of award**

01/02/2013

## **Total duration of award in years**

3.2

## **The project/programme is most relevant to:**

Alzheimer's disease & other dementias

## **Keywords**

**Research Abstract**

Background: It is a national priority to improve acute care for people with dementia. Such individuals – primarily older people – comprise at least 25% of patients yet their needs often go unrecognised and unaddressed. They are at high risk of unintended adverse events such as delirium and falls that contribute to poorer health outcomes, including greater mortality and loss of independence, with resource consequences of increased length of hospital stay and new care home admissions. A national survey of carers of people with dementia (n=1,291) conducted by the Alzheimer’s Society in 2009 found that key areas of dissatisfaction were lack of understanding and recognition of dementia by staff, not being helped to eat and drink, little stimulation and social engagement and insufficient involvement with decision making. Approximately half of respondents reported further deterioration in behavioural and psychological symptoms for the person with dementia and adverse effects on their general physical health unrelated to the medical condition. Older people and their families consistently place high value on hospital care which promotes good interpersonal and personalised relationships between patients and staff and which should help to prevent some of these problems. Despite being prioritised in the NSF for older people, there is a lack of methods to help ward teams practically implement ‘person-centred care’ or to provide evidence of improvement in outcomes for older patients or people with dementia. The ‘PIE programme’ comprises of a qualitative observational tool and a linked process for change with respect to working with people who may have dementia. It is introduced to hospital staff via a one-day workshop including group discussion of the meaning of person-centred acute care for people with dementia. Is intended for use in a quarterly practice development cycle for ward teams to identify and make step-by-step changes in ward communicative practices so that they gradually become more person-centred. It was initially designed for use in a national audit of care to describe the quality of care received by people with dementia in acute hospitals, yet hasn’t been tested as an intervention in its own right. The proposed research will implement the PIE programme as a longer-term strategy in five NHS Trusts (11 wards) over 18 months to develop person-centred communication practices and to explore how or whether this actually effects change at organisation, practice and patient levels. It is hypothesised that person-centred communicative practices will lead to improvements in person-centred care and associated health outcomes for people with dementia. The research questions are: 1. Does the PIE programme change ward staff’s understanding and awareness of person-centred care for people with dementia? 2. Does the process of change initiated through the PIE cycles of observation, action planning, action and review change team members practices and behaviour in ways that are consistent with person-centred care over 18 months? 3. How does the process of change occur? What are the factors that facilitate or hinder change? 4. Is there evidence that the PIE programme is effective in improving care for people with dementia admitted to acute wards, as experienced by those patients and/ or observed by their relatives/ caregivers? 5. Is there preliminary evidence of effectiveness of the PIE programme in improving organisational and clinical outcomes for people with dementia? Research Design: The study will perform a mixed method, multiple case study design aimed at securing an in-depth understanding of the process of implementation and outcomes of the PIE programme in the real life setting of acute hospital wards with a substantial proportion of older people among its patients. Conceptual framework: The PIE programme is underpinned by a theory of change approach to implementation. Thus, there is the conception of implementation as occurring over time, through a team learning process that combines education and sensitising staff to observe taken for granted practices; engaging and motivating them in developing solutions by linking beliefs and

values to practice improvement individually and collectively; and addressing systems and care processes that support and sustain change efforts. We propose to use Normalisation Process Theory (NPT) as a sensitising framework for data collection on the implementation process as it evolves over time. Sampling strategy: We have identified one acute elderly care ward and one orthopaedic ward in each of five trusts, and an additional ward with 13 beds for people with dementia at one site. They have been selected to provide diversity in terms of size (small, medium, large) and type of locality (metropolitan/ town with a rural hinterland) among those that expressed an interest in being involved in the study. Further, senior ward staff have demonstrated readiness and commitment to engage in the process of change over time. There will be three main data collection periods on each ward: T0: 2 months immediately before PIE implementation (baseline) T1: 2 months to commence 9 months after PIE implementation (interim) T2: 2 months to commence 18 months after PIE implementation (follow-up) The patient group: The population of patients who are vulnerable because they live with dementia or have an on-going cognition, memory or communication problem will need to be identified for purposes of examining clinical outcomes and purposive sampling for in-depth case study (observation/ interview). During each period of data collection, a senior nurse and ward clerk on each of the participating wards will identify all such patients. Assuming 26 beds per ward, 50% of patients who have dementia or who fit our inclusion criteria (as in our proposed study wards), and an average length of 14 days, there should be approximately 572 patients in the 11 wards/5 sites during each of the two month data collection periods (baseline, interim and follow-up) (1716 in total). The total patient group (with and without dementia) for whom we will compile a descriptive ward profile and obtain individual anonymous data on quantitative outcomes of interest is 3,432. The number of patients invited to participate in a case study will be up to 6 per ward during each data collection period (66), 198 over the project duration. Data Collection Methods will examine: 1. Ward Culture, Staff Knowledge and Understanding of Practices and Patient and Staff Profile Qualitative and quantitative methods (participant observation, analysis of documents, staff questionnaires, informant interviews with senior staff, patient and staff profile). 2. Process and Impact of PIE as a Programme to Effect Change in Staff Practices Organisation of 3 ward implementation workshops per Trust with staff over the 18 months PIE implementation (approximately 3, 9 and 15 months in) to examine the dynamic of change effected through the PIE cycles; achievements and obstacles at each stage and an understanding of the contextual factors that sustain/ impede staff participation. Contemporaneous research observations of action planning and review meetings; PIE documentation on action plans and achievements; researcher events 'logs' to capture change in policies, systems and procedures; staff interviews and 2 workshops to facilitate cross case study site comparison of processes and outcomes at 18 months. 3. Care Experiences of People with Dementia; Organisational and Clinical Outcomes Case studies (observation/ conversational interviews) with up to 6 patients who may have dementia in each ward along with their relative/ caregiver, to locate the care experiences as described by individual patients in the context of observed communicative practices of staff with them. Data on unintended adverse events (falls and delirium incidence) for all patients admitted to the ward at each data collection period. Falls data via weekly inspection of ward documentation; delirium via the Delirium Observation Screening Scale. PAS data on length of in-patient stay, discharge destination, hospital mortality and 30-day re-admissions will facilitate additional examination of these outcomes over time. Analytic Strategy: Data analysis will be carried out at different levels. Analytic methods appropriate to the mode of inquiry in respect of each type of data (qualitative and quantitative) will be carried out for each individual case (ward) in the first instance and then across the

dataset as a whole. For each case, and using the logic model drawn from our research questions (hypothesised linkages between the PIE programme, staff practices and patient outcomes), we will develop an explanatory account of the pattern of relationships between these and the contextual factors that affect them. We will compare and contrast cases using the method of analytic induction to develop explanations that go beyond the individual case to assess how and under what circumstances the PIE intervention results in particular outcome patterns for staff, patient experiences and outcomes.

### **Lay Summary**

**Further information available at:**

**Types:**

Investments > €500k

**Member States:**

United Kingdom

**Diseases:**

Alzheimer's disease & other dementias

**Years:**

2016

**Database Categories:**

N/A

**Database Tags:**

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