

**TheKingsFund>**

Improving the  
patient experience

**Developing Supportive  
Design for People with  
Dementia**

**The King's Fund's  
Enhancing the  
Healing Environment  
Programme 2009-2012**



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The King's Fund is an independent charity working to improve health and health care in England. We help to shape policy and practice through research and analysis; develop individuals, teams and organisations; promote understanding of the health and social care system; and bring people together to learn, share knowledge and debate. Our vision is that the best possible care is available to all.

## The King's Fund

This phase of The King's Fund's Enhancing the Healing Environment programme was commissioned and funded by the Department of Health.



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*Inset: Garden artwork, Franklyn Hospital, Devon Partnership NHS Trust*  
*Back: The EHE team, Musgrove Park Hospital*

*Photography: Hedley Finn*  
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# Foreword

I am delighted to have the opportunity to provide a foreword to *Developing Supportive Design for People with Dementia*, which marks the completion of 26 schemes in acute, community and mental health hospitals to improve the environment of care for people with dementia as part of the King's Fund's Enhancing the Healing Environment (EHE) programme in England.

The environment in which we live, work and are cared for makes a real difference to us all yet there is still relatively little known about the particular effect of the environment on people with dementia in care settings, particularly in hospitals. All of us can be anxious and frightened when we go into hospital and we need to remember how much more of a challenge this can be for people with cognitive problems and dementia, estimated to be over a quarter of patients in general hospitals, especially those with visuo-spatial problems often seen in dementia.

This programme was funded by the Department of Health as part of work to support the implementation of the National Dementia Strategy in England. There was tight competition for the available places and projects were chosen to reflect the care pathway from diagnosis to end of life care.

The EHE programme's emphasis on involving patients and carers and the staff who care for them in every scheme makes each one rightly unique. However, there are many overarching lessons to be drawn from the achievements of the local teams and their tenacity in making sure that they have achieved high-quality outcomes for people with dementia and the staff who look after them. The attention to detail that is such a characteristic of the projects could not have been achieved without significant input from both people with dementia and their carers, and it is a testament to the sensitivity and care taken by the project teams that people have been so willing to make such a positive contribution to their work.

It is clear from the outcomes of the various projects described in this publication, and from the positive evaluation of the programme by Abi Masterson that the programme has succeeded in its aims both of providing exemplar projects from which we can learn, and of raising the profile of dementia care across the service. The environmental assessment tools and design principles developed with the participating trusts are already being widely used. These have been designed to be practical and easy to use so that people with dementia and their carers can have a significant role with staff in developing more dementia friendly design. I am also very pleased that so many of the projects have acted as catalysts for community involvement and the establishment of volunteer schemes and the teams are to be congratulated on their extraordinary fundraising activities.

As the Prime Minister's Challenge outlines, dementia is one of the most significant challenges facing us as a society. Having visited completed EHE schemes I have heard and seen at first hand the difference that relatively small scale schemes, developed with service users and staff, can generate extraordinary ownership and allow true innovation to flourish.

This programme has left not only a legacy of inspiration but has also been instrumental in the Secretary of State's announcement in October 2012 of a £50 million dementia friendly environments capital fund to improve the environment for people with dementia across health and social care. This is a real achievement and lasting legacy for all those involved in the schemes highlighted in this publication and one in which they can all be justly proud.

## Professor Alistair Burns

National Clinical Director for Dementia

January 2013

**Professor Alistair Burns  
visits the EHE scheme at  
Bradford Royal Infirmary**



## Acknowledgements



In 2008 The King's Fund submitted a report to the Department of Health which outlined how Enhancing the Healing Environment (EHE) principles could be mainstreamed into the NHS. The recommendations included a proposal to support the implementation of the national dementia strategy through a new programme focused on improving the environment of care for people with dementia in hospitals. This work was to build on a previous EHE programme, *Environments for Care at End Life*, which had demonstrated that the EHE not only delivers changes in the physical care environment but also has the power to transform patient experience and support organisations to deliver national strategy. As result of the report the Department commissioned The King's Fund to develop and manage the *Environments of Care for People with Dementia programme*.

The impact of the environment on people with dementia is, as Professor Alistair Burns, National Clinical Director for Dementia, points out in his Foreword, becoming better understood but there are still too few practical examples of how relatively simple and straightforward changes can make a real difference to people with dementia, their carers and the staff who look after them.

This publication marks the completion of 26 projects in 23 NHS trusts. The King's Fund has been enormously touched by the willingness of carers to contribute their experience and ideas about how to create improved environments. Their practical advice, based on personal learning through caring for people with dementia, has challenged assumptions and played a critical part together with patients in the development of each of the schemes. Our thanks are due to them and the many trust boards, Leagues of Friends, local charities, businesses and organisations that have supported the projects. Above all thanks must go to the 23 multidisciplinary teams who have worked so hard and achieved such success.

Alistair Burns, Jane Gilliard and colleagues from the National Dementia Strategy Implementation Team, and Sue Taylor from the Estates and Facilities Directorate have helped to shape and guide the programme. Dame Christine Beasley, former Chief Nursing Officer, and Professor Rob Smith, former Director, Gateway Review and Estates & Facilities Division have both been extraordinary champions of EHE and their ongoing support has been invaluable.

The King's Fund is grateful to all those who by their support have ensured the success of this phase of the programme. In particular we would like to thank those who have contributed to the teams' development programmes including colleagues at ICI paints (now part of AkzoNobel); Richard Mazuch, Nightingale Associates; Philips Lighting and Tate Modern. I would also wish to thank Abigail Masterson, Abi Masterson Consulting Ltd, who undertook the programme evaluation and has helped shape our assessment tools and design principles for more dementia friendly design.

We are very pleased that the projects are already acting as exemplars and that the resources that have been developed and field tested during the programme are proving so useful to such a wide range of NHS and social care organisations.

Our ambition when our President, HRH The Prince of Wales launched the programme in 2000 was to enhance the healing environment in London's acute hospitals and his ongoing support and interest has been greatly appreciated by all those involved in the programme. It is a tribute to Sarah Waller, Hedley Finn and the EHE team that their commitment and infectious enthusiasm, has grown and nurtured EHE enabling its outcomes to make a real difference to patients, staff and organisations and to shape national policy and practice.

**Professor Chris Ham CBE**

Chief Executive, The King's Fund

January 2013

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# Part 1 Background

1. Introduction
2. Enhancing the Healing Environment
3. The Environments of Care for People with Dementia programme

# 1 Introduction

The environments in which we live and work have a profound influence on our physical and psychological wellbeing. Research has repeatedly confirmed that a supportive and welcoming environment can have positive effects both on those who visit hospitals – whether as patients or carers – and those who work in them (Ulrich 2001). But hospital environments are not always designed with these principles in mind.

In the case of dementia, there is increasing evidence that the environment of care in hospitals can have a significant and detrimental effect on patients with cognitive problems and dementia, leading to additional distress and confusion (Alzheimer's Society 2009). An estimated 25 per cent of people who access acute hospital services have dementia, and the number of people living with dementia is expected to double over the next 30 years (Alzheimer's Society 2009; National Audit Office 2010).

Dementia has a major, and growing, impact on health and social care today. The statistics are stark – 670,000 people in England are living with dementia with many remaining undiagnosed, while a further estimated 21 million people have a close friend or family member with dementia. One in three people over 65 years of age will have dementia by the time they die (Department of Health 2012a).

This publication describes the work of Developing Supportive Design for People with Dementia – the latest phase of The King's Fund's Enhancing the Healing Environment (EHE) programme. The EHE initiative encourages and enables clinically led multidisciplinary teams to work in partnership with patients and carers to improve services through environmental change. Running since 2000, it has focused on improvements to a range of services, including acute, community and mental health services, prison health care services, palliative care and bereavement services and, most recently, mental health and community units and general hospitals where people with dementia are cared for.

## The policy context

The need to improve dementia care is now high on the political agenda. In March 2012, the Prime Minister launched his 'dementia challenge' to ensure improvements in dementia care and research by 2015 (Department of Health 2012a). The challenge recognises that, despite much progress since the publication of the national dementia strategy (Department of Health 2009a), a great deal more can be done to improve the diagnosis and care of people with dementia, whether in their own homes, in care homes or in hospital.

There is also growing recognition of the need to improve the care environment as part of this work. The NHS Constitution for England 2012 (Department of Health 2012b) recognises the importance of the care environment to the patient experience. The NHS Operating Framework for 2012/2013 (Department of Health 2011b) places a renewed emphasis on implementing the dementia strategy (Department of Health 2009), with a new Commissioning for Quality and Innovation (CQUIN) goal of improving diagnosis of people with dementia in hospital. The Dementia Action Alliance and the NHS Institute have recently launched a Call to Action to improve the care of people with dementia in acute hospitals (NHS Institute 2012).

In autumn 2012 the Health Secretary Jeremy Hunt announced £50 million of capital funding for improvements to dementia care environments in hospitals and care homes. This news is extremely welcome, and demonstrates an awareness of the urgent need for change.

***“Carers tell us time and again that when it comes to hospitals, care homes or other settings, it's often the small things – whether clear signage, light and airy rooms or good handrails – that make a big difference.”***

Secretary of State  
for Health  
Hunt (2012)



Especially when planned in partnership with staff and patients, carers and service users, improvements to the physical environment can act as a catalyst to practice and service improvement. Improved environments can transform the patient experience, humanise care, reduce accidents and adverse incidents, and increase staff morale.

In this way, EHE also contributes to the aims of Quality Innovation, Productivity and Prevention (QIPP), which seeks to improve quality while working towards the Nicholson challenge to find £15–20 billion of efficiency savings from 2011 to 2014. EHE contributes to this challenge by improving service quality, encouraging innovation, raising staff morale and wellbeing, and supporting health promotion.

EHE has also helped participating organisations meet at least two of the domains of the NHS Outcomes Framework (Department of Health 2011a): domain 4 (ensuring that people have a positive experience of care) and domain 5 (treating and caring for people in a safe environment and protecting them from avoidable harm).

The various independent evaluations (see p12) have emphasised the pivotal role that EHE can play in supporting health care providers to implement national strategy by raising organisational awareness and understanding.

**Government support for EHE**

Since 2003, different phases of the EHE programme have been commissioned and funded by the Department of Health and NHS Estates. The Chief Nursing Officer has sponsored the programme in support of work to improve the patient experience. Specific phases of the programme have also been supported by the National Director for Mental Health, the National Cancer Director and the National Clinical Director for Dementia, together with the Director of Estates and Facilities at the Department of Health.

**Maximising value for money**

Through the different phases of the programme, EHE's commitment to rigorous external evaluation has provided clear evidence of key outcomes with direct economic impact on service costs. These include:

- reduced falls
- reduced length of stay
- reduced incidents of challenging behaviour among service users
- increased carer involvement
- the personal and professional development of team members, with improvements in staff retention, recruitment, sickness and absence
- increased productivity and reduced waste by using spaces more effectively
- improved opportunity to continue activities of daily living, increasing the chance of patients returning home following an acute episode of care
- closer links being formed with local communities
- influencing the design of new developments, including private finance initiative (PFI) schemes.

Especially in the current challenging climate it is important to make sure that environments are fit for purpose. Florence Nightingale realised this as far back as the 19th century (Nightingale 1863), but focusing on the physical environment of care is still considered innovative. Unfortunately, acute and mental health hospital buildings alike – even those that have been completed relatively recently – can have disabling features that hinder rather than promote healing and wellbeing.

The evaluation of this latest phase of EHE – the Environments of Care for People with Dementia programme (presented in Chapter 6) – shows that many participating trusts have achieved quality improvements in the physical environment and the care provided as well as improvements in clinical and staff outcomes. EHE is a simple model that can offer value for money.

## About this publication

This publication describes the work of 23 NHS trusts that took part in the latest phase of the EHE programme – Environments of Care for People with Dementia.

The projects were run in mental health and community units and acute trusts. Their outcomes show how relatively straightforward and inexpensive changes to the design and fabric of the care environment can have a considerable and positive impact on the wellbeing of people with dementia.

The publication is divided into three parts:

**Part one** sets out the scope and purpose of the publication. Chapter 2 describes the Enhancing the Healing Environment programme and its achievements to date. Chapter 3 goes on to look at the most recent stage of the programme – Environments of Care for People with Dementia – on which this publication focuses.

**Part two** sets out the findings and outcomes from the latest stage of the programme. Chapter 4 presents case studies of the participating sites. Chapter 5 highlights the overarching themes. Chapter 6 presents the evaluation and describes the development of the tools included in the Resources section: the EHE assessment tool, a set of overarching design principles and a bibliography (see Part three, below). It also sets out recommendations.

**Part three** contains five key resources:

- Tool 1: The EHE assessment tool – designed to help carers and staff to assess how dementia friendly their care environment is
- Tool 2: Overarching design principles – a set of principles for creating more supportive environments for people with dementia in hospital, grouped around desired outcomes for people with dementia in ward environments
- Tool 3: the bibliography used to inform the development of tools 1 and 2



Project opening, Cornwall Partnership

- a project directory detailing the artists and designers involved in each scheme along with costs
- a list of references.

The programme evaluation describes a range of positive outcomes. It finds that making the physical environment more dementia friendly has a positive impact on falls, incidence of violence and aggression, and staff sickness and absence. However, it acknowledges that too few staff understand the impact of the environment on people with dementia, and that even modern, purpose-built hospital accommodation is not currently dementia friendly.

This publication seeks to help to address this gap, providing practical, value-for-money examples to encourage and inspire staff and their organisations to provide an environment of care that better supports people with dementia.

## 2 Enhancing the Healing Environment

Enhancing the Healing Environment (EHE) is a programme that works to encourage and enable local teams, led by clinical staff, to work in partnership with service users in order to improve the environment in which they deliver care. It also aims to raise awareness and understanding – both within and beyond the project teams – of the therapeutic value of good design.

***“The residential programmes provided were of an exceptional standard and enabled excellent networking opportunities and a forum to exchange thoughts and ideas with others who were also experiencing challenges.”***

Occupational therapist

***“The project has given me the confidence to work as a project manager, to be able to influence people that are not for moving, to resolve problems, to be able to balance the books, to think outside the box, to motivate people – and to design a garden!”***

Health care support worker

In the past 12 years, EHE has worked with more than 230 health care providers, including NHS trusts, hospices and HM prisons. These projects have proved repeatedly that it is possible to transform health care settings with minimum outlay, through practical, high-quality, value-for-money environmental improvements that lead to improved outcomes and wellbeing for patients and staff. (See Figure 1.)

**The EHE Network** was launched in 2005 to support EHE teams to continue to bring about systemic improvements in the quality of the healing environment. Network awards have provided capital funding for specific environmental improvement projects developed using EHE principles.

### How the programme works

The programme consists of two main elements:

- **a development** programme to equip teams with the knowledge and skills they need to undertake their projects – particularly in fostering co-operation and engagement with service users, carers and the public. Teams explore practical ways of improving the health care environment with colour, light, art and design. The programme includes visits to completed EHE projects and to Tate Modern.
- **project grants** (capital allocations) for each team to carry out a project to improve the patient environment.



Photographs of Yorkshire, Bradford Royal Infirmary

FIGURE 1: EHE PROGRAMME TIMELINE 2000–2012

2000	2001			2002	2003		2004	2005
	January	June	October	May	July	November	November	December
Programme launch	Cohort 1: London acute north west/ south west	Cohort 2: London acute north east/ south east	Cohort 3: London acute north central	Cohort 4: London mental health	Cohort 5: London primary care trusts	National extension 1	Mental health and learning disabilities 1	Mental health and learning disabilities 2
	8 trusts	11 trusts	13 trusts	11 trusts	5 trusts	23 trusts	23 trusts	23 trusts



Seating area, Franklyn Hospital

Each project is run by a clinically led multidisciplinary team that include estates and facilities staff, arts co-ordinators, modern matrons and other staff, alongside service-user representatives. In the prison service, participants have included health care staff, prison officers and security staff, as well as works managers.

By using positive and practical examples to inspire and challenge the norm, EHE encourages teams to critically analyse both the care process and the care environment with service users before developing its plans for redesign and to enable innovative solutions to emerge. As a result, many schemes not only bring about significant improvements in the experience of patients and carers, but also support wider improvements in care delivery and organisational change.

Project aims

To be successful in their application trusts must show that their projects will promote patient wellbeing and foster a healing environment, with an emphasis on high-quality, value-for-money schemes that make maximum impact with the resources available and exemplify good design principles.

Projects have ranged from refurbishing corridors to redesigning hospital waiting areas, major ward refurbishments, creating gardens and quiet social spaces, introducing artworks in patient areas, and improving bereavement facilities and mortuary viewing rooms. In prisons, projects have included the redesign of primary care centres, improvements to association areas and exercise yards, and the creation of palliative care suites within health care facilities.

For full details of how the programme is run, go to: [www.kingsfund.org.uk/ehe](http://www.kingsfund.org.uk/ehe)

***“The events were not only of educational value but they encouraged interaction with people from other organisations. The enthusiasm of everyone was awesome.”***  
Governor and carer

***“Having learnt about colour, light and how the environment can affect people, I think I will be a lifelong campaigner against shiny floors and magnolia walls.”***  
Facilities site co-ordinator

***“We felt invested in and believed in, and this in turn allowed us to believe in ourselves and that anything was possible.”***  
Facilities site co-ordinator

	2006	2007	2008	2009		2010			2012
	January	July	April	April	April	March	March	April	January
	Environments for care at end of life Pilot  6 trusts 2 hospices	HM prisons and young offenders institutions Pilot  5 HMP/YOI	Environments for care at end of life – national extension  19 trusts 1 HMP	Environments of care for people with dementia 1  10 mental health trusts	HM prisons 1  20 HMP/YOI	Environments of care for people with dementia 2  12 trusts (acute and mental health)	HM prisons 2  10 HMP/YOI	EHE Network awards (see box)  2 awards (mental health)	EHE Network HM Prisons awards  8 awards



## How the programme is evaluated

A key principle of the EHE programme is to rigorously assess its work through external evaluations, in order to measure outcomes, maintain quality, develop learning and share lessons. Each of these evaluations reported significant benefits for patients, staff and organisations, with impact going far beyond physical changes to the built environment:

- Medical Architecture Research Unit (Department of Health 2003)
- York Health Economics Consortium/ RKW Healthcare Strategists (Department of Health 2006)
- Abi Masterson Consulting (Waller et al 2008)
- Sainsbury Centre for Mental Health (SCMH 2009)
- Sue Ryder Centre, University of Nottingham (The King's Fund 2010)
- Health Services Management Centre, University of Birmingham (HSMC 2012).

The most recent evaluation is presented as Chapter 6 of this publication.

### EHE as good practice

- EHE projects carried out by 46 NHS trusts between 2004 and 2008 are showcased in a Department of Health publication Improving the Patient Experience: Sharing success in mental health and learning disabilities (Department of Health 2009a).
- Findings from the 2008 evaluation informed the development of the national End of Life Care strategy (Department of Health 2008).

## Benefits of the programme

The various evaluations of the EHE programme have demonstrated that the programme provides a proven methodology that:

- builds leadership capacity and capability through strong, empowered, confident multidisciplinary teams
- ensures that teams have the required skills in leadership, facilitation and project management to successfully complete their projects through a bespoke development programme
- develops ownership for, and an understanding of, the effect on the environment on patients, relatives and staff through strong service user representation and consultation
- assures delivery using clear reporting arrangements and approvals criteria.

Longer-term benefits from the programme include:

- increased ownership of the health care environment and a greater awareness of its impact on patients, staff and the public
- demonstration of how small-scale projects can act as catalysts for major change
- the development of new skills in leadership and facilitation
- wider use of the arts in hospital settings
- evidence of the therapeutic impact of good design
- the potential for improved environments to reduce aggressive behaviour and prevent slips, trips and falls
- improvements in staff morale, recruitment and retention
- project involvement as an aid to recovery (as reported by service users)
- longer-term cost reductions, including reduced maintenance and redecoration costs.

***“Overcoming challenges enables you to grow as an individual and I feel through the experience I am now more confident as a person.”***

Staff nurse

***“Involvement in this project taught me that you can aim for what you think may be impossible and with enough persistence you can achieve it.”***

Ward sister

***“It has improved my appreciation of art tremendously – the day at Tate Modern was a turning point for me.”***

Locality manager, Alzheimer's Society

Sarah Waller and Hedley Finn with John and Pauline Homer, carer advisors, New Cross Hospital opening event



More broadly, the programme is improving quality in health care by raising awareness of the critical importance of the environment to health care and contributing to the growing evidence base on the therapeutic impact of good design and the arts in hospitals.

The EHE programme has been successfully adapted to meet the changing challenges of a range of health care providers and service developments over the past 12 years. But throughout that time, one theme has remained constant: the need for health

care environments to be created that encourage patients and those who care for them to feel welcomed, looked after and cared for, and staff to feel valued. Without exception, the overall impact of the EHE programme in the participating organisations has been greater than the individual projects.

For more information about the EHE programme and a directory of completed projects, go to: [www.kingsfund.org.uk/ehe](http://www.kingsfund.org.uk/ehe)



Consultation  
event, Devon  
Partnership

***"I have noticed a real change in my practice. I have become more confident, positive and assertive when I need to be. Also I have learnt the value of being prepared with an evidence base when asking to do something a bit different!"***

Senior occupational therapist

***"The extra learning taken on as part of the project has completely changed future plans for my work."***

Carer

***"I have been inspired by the programme's content and leadership. It has stretched and challenged me in many ways and revived my interest in art and design and my passion to improve dementia care."***

Occupational therapy manager



Artwork, University Hospital

# 3 The Environments of Care for People with Dementia programme

As people with dementia comprise an ever-growing proportion of people using health services, it is essential that health environments are tailored to their needs. An unsuitable care environment can have a significant negative impact on someone with dementia. But the solutions are often surprisingly simple. This chapter looks at what we know about how care environments affect people with dementia. It then goes on to describe the latest phase of Enhancing the Healing Environment – the Environments of Care for People with Dementia programme.

## What do we mean by ‘dementia’?

Dementia is an umbrella term used to describe the range of conditions that cause changes in memory and other cognitive abilities that are severe enough to interfere with daily life. It is caused by changes in the brain, and is more common in older people. Normal ageing has an impact on the senses – particularly sight and hearing – but this is exacerbated by the additional damage to the senses and perception associated with dementias such as Alzheimer’s disease.

For more information, go to [www.alzheimers.org.uk](http://www.alzheimers.org.uk)

- avoid stepping on shadows or coloured strips on flooring, because they may look like a change of level
- resist walking on shiny flooring because it looks wet or slippery
- misinterpret reflections in mirrors, windows and shiny surfaces
- have difficulty hearing or understanding conversations if there is competing background noise – for example, from a television
- have a reduced tolerance for sound and feel anxious in situations with unfamiliar or loud noises
- feel curious and want to walk around.

The detrimental effect of hospital stays on the independence of people with dementia is well documented (Alzheimer’s Society 2009), and there is widespread awareness of the problem. Many patients lose their independence during a period in hospital if they are unable to continue with their daily activities. As a result, they may not be able to return home when the acute episode of care is completed. This can be devastating, both for them and their families (Alzheimer’s Society 2009).

There has been significant progress in the care of people with dementia since the publication of the national dementia strategy (Department of Health 2009b), with many nurses being appointed dementia champions and staff training becoming more widely available. However, research into the impact on clinical outcomes of the environment of care on people with dementia is still sparse, both nationally and internationally (Davis et al 2009, Fleming et al 2007), and most of the existing research has been undertaken in care homes rather than hospitals.

## How care environments affect people with dementia

Being admitted to hospital is a potentially frightening experience that can cause agitation, disorientation and distress in any patient. For someone with dementia, this anxiety is often increased by unfamiliar surroundings and the heightened sensory challenges associated with a busy unit.

Someone with dementia may:

- be confused and agitated in unfamiliar environments
- become restless and distracted in environments that are visually over-stimulating or where there is competing visual information, such as highly patterned wallpaper or too many notices or signs
- have difficulty seeing handrails, toilet seats or doors, or the food on their plate, if these are the same colour as the background

***“We are now focused on improving engagement with our patients. The whole experience has raised not only the expectations we hold for our dementia patients and what they can achieve, but also for ourselves: what we can achieve in contributing further to positive dementia care.”***

Matron



This means that there is still a significant knowledge gap about the critical role that relatively straightforward and inexpensive improvements to the built environment can play in improving care and supporting the wellbeing of people with dementia. However, many recent reports cite the need to improve care environments. So, a key aim for this programme was to build the evidence base in this area.

The most recent evaluation (see Chapter 6) seeks to address the gap in knowledge about the impact of hospital environments on people with dementia, by taking the opportunity to develop knowledge of best practice in relation to physical environments that enable and support people with dementia, both in acute, general and mental health hospital settings.

***“The project offered me the opportunity to share my own experience for the benefit of others. Somehow, therefore, good could come out of what my husband had gone through.”***  
Carer

***“Our main aim is to influence the care homes so that we stand a chance of improving the lives of people through simple changes to the environment, and by creating artworks that can be achieved for little or no cost.”***  
Occupational therapist

**Literature on the need to improve care environments for people with dementia**

- Acute Awareness: Improving hospital care for people with dementia (NHS Confederation 2010) draws attention to the need to improve care environments
- Report of the National Audit of Dementia Care in General Hospitals (Royal College of Psychiatrists 2011) brings a sharp and timely focus on the need to improve the physical environment of care in hospitals
- Commitment to the Care of People With Dementia in General Hospitals (Royal College of Nursing 2011) describes five principles to improve the care of people with dementia in general hospitals, one of which is that environments should be dementia friendly and support independence and wellbeing
- Delivering Dignity (Commission on Dignity in Care for Older People 2011) states that hospital boards and care home managers have a duty to ensure that buildings, beds and equipment are suitable for use with older people – particularly those with dementia.

**EHE: a contribution to improving care**

The recent EHE projects have shown that by taking some simple steps to ensure that environments are appropriately designed, it is possible to reduce confusion and agitation, encourage independence and social interaction, and to help people retain skills of daily living. They are also showing that by using design principles founded on an understanding of the impact of the physical environment on people with dementia, it is possible to encourage greater carer involvement as well as improving staff morale, recruitment and retention.

**Benefits of improving care environments for people with dementia**

This programme showed that appropriately designed environments can:

- reduce the incidence of agitation and challenging behaviour
- reduce the need for anti-psychotic medication
- reduce falls
- promote independence
- improve nutrition and hydration
- increase engagement in meaningful activities
- encourage greater carer involvement
- improve staff morale, recruitment and retention.



Ward welcome sign,  
Bradford Royal Infirmary

## How the EHE dementia programme came about

In 2008, at the request of the then Health Minister responsible for care services, The King's Fund submitted a report to the Department of Health outlining how EHE principles could be mainstreamed into the NHS. Part of this initiative was targeted at supporting the implementation of the national dementia strategy. The following year, the Department of Health commissioned The King's Fund to develop an EHE programme to improve the environment of care for people with dementia. In all, 22 organisations participated in the programme, with a further project as part of the EHE Awards scheme in 2010 also focusing on improving the care environment for people with dementia. For more information, go to:  
[www.kingsfund.org.uk/dementia](http://www.kingsfund.org.uk/dementia)

## Programme methodology

The programme comprised two stages, described below.

### The first stage of the programme

In 2009, the Department of Health invited applications from trusts that provided mental health and learning disabilities services to people with dementia. The Department of Health allocated each successful trust a £30,000 capital allocation, as well as funding the team development programme and programme management provided by The King's Fund. Applications had to have board support and each trust had to agree to allocate at least an additional £10,000 to the scheme. Trusts that had previously taken part in the EHE programme were eligible to apply but had to nominate a new project team.

Applicants were selected from across England on the basis of:

- geographic spread
- whether their location was urban or rural
- the proposed project and aims
- specific cultural and diversity issues
- the trust's existing activity to improve the care of people with dementia and to create a healing environment.

***"It is not often you are given the chance to really make a lasting difference like this – changing not just the environment, but people's views and perceptions of what an area that cares for people with dementia can be like in the NHS."***

Older people's nurse  
specialist

***"It's wonderful to be given the opportunity to be a part of something really positive in these difficult times."***

Team leader

The programme was four times oversubscribed, and 10 projects were chosen to reflect the care pathway, from diagnosis (memory clinics) to end-of-life care (palliative care). All but two of the successful trusts had previously taken part in the EHE programme.

**The second stage of the programme**

In recognition of the high proportion people with dementia who are cared for in general hospital settings, the programme was opened in 2010 to all NHS trusts in England that provided services to people with dementia. For this second stage, the Department of Health provided each successful trust with a £50,000 capital allocation, with the trust expected to allocate at least £15,000 to its scheme. The selection criteria remained unchanged, and 59 applied for the 12 available places. Two places were allocated to mental health trusts, one to a community provider and the remainder to acute hospitals. Nine of the trusts were new to the EHE programme.

The spread of participating trusts is shown in Figure 2.

**EHE Network capital awards**

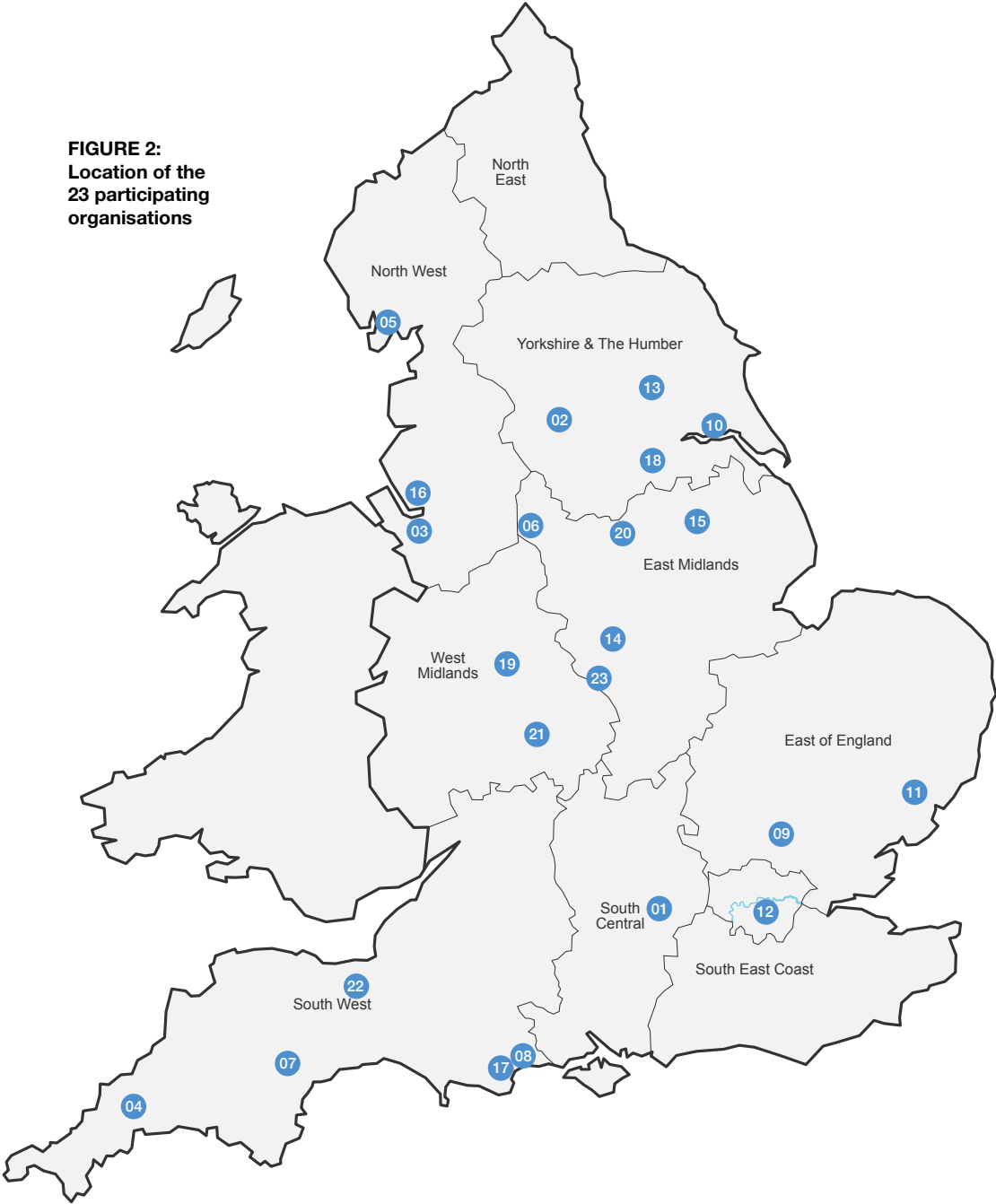
In 2010, to mark the 10th year of the EHE programme, two capital awards were made available to members of the EHE Network by the Department of Health.

The first was to Pennine Care NHS Foundation Trust, for a project to develop a woodland retreat for its child and adolescent mental health service. The second was to Hertfordshire Partnership NHS Foundation Trust, for improvements to Elizabeth Court – a long-term care facility for people with dementia. This project has been included in this publication (see p38). For more information on the EHE Network, go to: [www.kingsfund.org.uk/ehe](http://www.kingsfund.org.uk/ehe)



Garden, New Cross Hospital

**FIGURE 2:**  
**Location of the**  
**23 participating**  
**organisations**



**Participating organisations**

01	Berkshire Healthcare NHS Foundation Trust	13	Leeds and York Partnerships NHS Foundation Trust
02	Bradford Teaching Hospitals NHS Foundation Trust	14	Leicester Partnership NHS Trust
03	Cheshire and Wirral Partnership NHS Foundation Trust	15	Lincolnshire Partnership NHS Foundation Trust
04	Cornwall Partnership NHS Foundation Trust	16	Mersey Care NHS Trust
05	Cumbria Partnership NHS Foundation Trust	17	Poole Hospital NHS Foundation Trust
06	Derbyshire Community Health Services	18	Rotherham, Doncaster and South Humber NHS Foundation Trust
07	Devon Partnership NHS Trust	19	Royal Wolverhampton Hospitals NHS Trust
08	Dorset HealthCare University NHS Foundation Trust	20	Sheffield Teaching Hospitals NHS Foundation Trust
09	Hertfordshire Partnership NHS Foundation Trust	21	South Warwickshire NHS Foundation Trust
10	Humber NHS Foundation Trust	22	Taunton and Somerset NHS Foundation Trust
11	Ipswich Hospital NHS Trust	23	University Hospitals Coventry and Warwickshire NHS Trust
12	King's College Hospital NHS Foundation Trust		



## Part 2 Outcomes

- 4. Project summaries
- 5. Overarching themes
- 6. The evaluation
- 7. Conclusion and recommendations

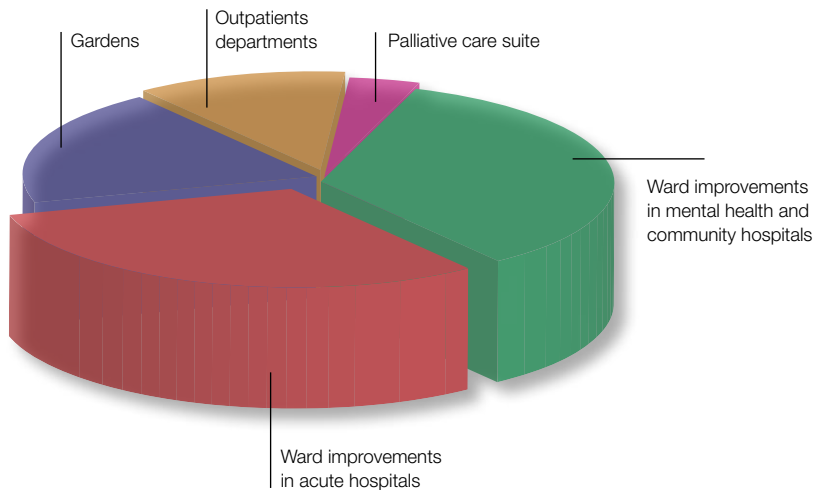
# 4 Project summaries

Part one of this publication set out the scope and purpose of the Enhancing the Healing Environment programme and its most recent phase: Environments of Care for People with Dementia. Part two provides a short summary of each of the schemes undertaken by the participating teams, with pictures highlighting particular aspects of the projects. Each scheme is different and unique to its setting, reflecting local needs and priorities.

The summaries are designed to be used as case studies, to show what can be achieved in a range of different settings by teams working in different ways and with access to a range of different resources and support. If you are considering undertaking a similar project, you will also find it useful to combine this section with the Project directory (p102), which provides details of artists and designers involved and the project costs.

Figure 3 below shows an analysis of the different types of projects carried out in this stage of the EHE programme.

FIGURE 3: Analysis of types of projects



## The projects

Three of the teams chose to carry out projects at more than one location, two at different locations within an acute hospital and the third at two community hospitals within the county.

In all, including the Hertfordshire EHE Awards scheme, 26 projects were completed. They comprised:

- nine ward improvements in mental health and community hospitals, including:
  - five that included improvements to gardens
  - three that included areas for therapy activities
  - three that included improvements to the entrance of the building

- eight ward improvements in acute hospitals
- five gardens, including:
  - four that were located in mental health or community hospitals (two of which were balcony gardens and included social spaces)
- three improvements to outpatient departments, including:
  - two that were in memory service clinics
- one palliative care suite in a mental health unit.



## Berkshire Healthcare NHS Foundation Trust

**A main day space for people with dementia is transformed into a soothing environment with facilities for relaxation, therapy and social dining**

***“The best part for me now is to observe patients using and enjoying the dayroom, having social interaction while eating in the dining area, and benefiting from the new therapy areas.”***

Occupational therapist

***“As an individual, I have grown, and am able to provide much better and more knowledgeable care for my patients. As a ward, our environment is light, bright and cheerful and provides a wealth of discussion topics. It’s a real joy to be able to work in such welcome surroundings.”***

Staff nurse

In this 24-bedded rehabilitation ward, staff had become aware that when patients had the opportunity to eat together, they became more sociable, ate more, and were more motivated in undertaking rehabilitation activities. However, the ward’s main day space (which included the dining space) was confusing to the residents and poorly lit, and did not provide an area of calm. In addition, the outdated assessment area (which had been designed as a small flat, with bedroom and bathroom) was underused and inflexible, while the physiotherapy space – located outside the ward – was inadequate for rehabilitation.

The team drew up plans for an ambitious redesign of the assessment ‘flat’ and the main day area, as well as the corridor area where some of the physiotherapy equipment was sited. The key aim of the redesign was to enhance social and therapy facilities by maximising the available space and creating a series of interlinking multi-purpose areas that offered choice to patients and visitors. The use of a muted, soft colour palate, together with a new, flexible and adjustable lighting scheme has created a sense of light in this previously gloomy area.

Patients are now offered a choice of seating in the main social area, which has been subdivided with bespoke oak and glass cabinets filled with memorabilia.

A new dining area provides improved opportunities for social dining and is already proving popular, allowing patients more independence and aiding improved nutrition.

The dining area also doubles up as a teaching area for patients and relatives on topics such as falls prevention. It has also been fitted with the equipment needed for carrying out occupational therapy assessments before people return home. A full-height staircase allows patients to practise climbing the stairs as they would at home, while physiotherapy walking bars are installed at the end of the area.

The new arrangement seems to encourage more patients to attend therapy sessions as they no longer need to leave the ward. The adjoining redesigned large toilet is also proving beneficial for assessments.

A bespoke floor-to-ceiling glass screen divides the two main areas, providing a stunning centrepiece to the refurbishment. The screen was commissioned from a local artist and features panels of cuttings from the local papers, providing interest and distraction for patients and visitors alike. The panels can be drawn back so that the whole area can be opened up as needed. The artist also created a large panel of the bridge at Maidenhead for the small therapy room, which adjoins the dining area.

The trust was undergoing substantial change during the project, but the team managed to consult with the local community and engage a wide range of organisations during the development of the scheme, which, together with the trust, provided much of the funding to transform the area. As a result of the project, patients are now spending less time by their beds and more time in the day areas, which are being used more frequently for visits and meaningful activities.





***“This project is a great example of NHS staff and the local community working together.”***  
Mayor, Royal Borough of Windsor and Maidenhead





## Bradford Teaching Hospitals NHS Foundation Trust

**A theme of ‘Yorkshire outdoors’ informs this innovative design, which promotes person-centred care and relaxation through art, film, colour and touch**

**“It was exciting and inspiring to see what can be achieved with imagination, dedication and funding used in a most beneficial way.”**

Representative, Bradford LINK

**“What started as a seed has grown into a tree.”**

Ward sister

Staff at the Bradford Royal Infirmary, recognised that even in its newer wards there could be improvements made to the physical environment to better support people with cognitive problems and dementia. Their project focused on two wards, aiming to promote person-centred care, improve the interaction between patients and staff and enhance the physical environment. The aims were to reduce episodes of agitation and improve the patient experience and staff morale.

Each ward presented the team with its own challenges. Ward 23, an orthopaedic ward, had originally been a doctors’ mess. Its corridors were cluttered, there was very little storage space, there were no views of the bed bays from the nurses’ station, and the whole area was poorly lit. Ward 29, a recently opened care of the elderly ward, was spacious but rather bland, with each bay looking similar. Meanwhile, the all-white toilet sanitary ware and sensor taps were causing difficulty for patients with visual problems.

The team set up a steering group with local voluntary and community representatives including Age UK, the Alzheimer’s Society and South Asian dementia group Meri Yardin. Following wide consultation, the group chose a theme of ‘Yorkshire outdoors’. Once fundraising began, the team made presentations to the trust itself, the Charitable Funds Committee, the Friends of Bradford Royal Infirmary and local businesses, to secure the £0.6 million needed to transform both wards. The trust provided significant support by agreeing to bring forward the major refurbishment of the orthopaedic ward by a year, enabling it to tie in with the EHE project.

Both refurbishments have incorporated the use of art, film, colour and touch to provide people with dementia and their carers with an environment conducive to relaxation, independence and better orientation, as well as encouraging meaningful activity, to make their hospital stays as comfortable as possible.

The refurbishment incorporates cinema seating, where patients and visitors can watch archive footage provided by the Yorkshire Film Archive. Accent colours are used to differentiate between bed bays. The toilets are now colour coded and new signage has been added. Working with a manufacturer, new ‘dynamic’ lighting systems are being trialled to help keep people active during the day and to assist in maintaining normal wake and sleep patterns. Early evidence of the benefits to patients and staff is encouraging, and the lighting will now be installed in other areas.

Much focus has been placed on helping patients to reminisce. Photographs of the Yorkshire landscape (chosen through a local competition), provide great interest and aid reminiscence. In the single rooms, relatives can bring photographs on a memory stick, to display on the televisions. Patients can also choose something for their bedside memory boxes from a collection of ‘Yorkshire in 100 objects’. Finally, the team has developed a ‘reminiscence table’, for social dining, in the orthopaedic ward, while patients and relatives in Ward 29 can visit their own café, funded by the Friends, for afternoon tea.

Meanwhile, the trust has agreed a local Commissioning for Quality and Innovation (CQUIN) goal – (see p7) with commissioners, encouraging further improvements across the trust, including painting toilet doors red and installing red toilet seats in all patient areas. Patient satisfaction with the environment in the two wards is high, orientation has improved, and visitors are enjoying having somewhere to talk to patients away from the bedside.

The team members were awarded Trust Team of the Year for their work. They also received the prestigious UK-wide 2012 Building Better Healthcare Award for interior design. Following this success, they are already advising on other refurbishment schemes, as well as talking about their work at local and national events.





Before



*This project has been driven by promoting patients, carers and staff engagement in meaningful activities, rather than accepting patients sitting alone in their rooms or staring at bland walls doing nothing. This huge redesign programme has very real benefits for families and carers, as they can come into the hospital with confidence, secure in the knowledge that our staff have designed wards specifically to enhance and enrich their loved ones care."*

Head of nursing,  
division of medicine

## Cheshire and Wirral Partnership NHS Foundation Trust

**Patients can help cultivate a newly designed garden adorned by artworks and butterflies, which leads into a new social space with stunning views**

***“I am delighted with the completed project. I am proud to have provided a facility that greatly improves the environment for our patients and families”***

Head of capital and property management

Cherry Ward is situated on the first floor of Chester Hospital and patients did not have regular access to any outside space. A ward activity and capacity review identified two bedrooms at the far end of the ward that had the potential to be redesigned into a social space, a sensory room and, most importantly, a balcony garden.

The team needed planning permission to create the structural support for the garden, which was built out from the ward, and now allows patients free access to outside space. Once it received permission, the construction had to be managed without closing the garden of the ward below, presenting a number of technical challenges.

High-quality design and a robust construction has ensured that the outside space feels like a continuation of the ward, rather than a separate, suspended space. The design has maximised the space available, with curved hardwood raised beds edged with steel to match the seating. Patients help maintain the planting, which is specially chosen to provide colour and interest, and a small potting area at the back of the balcony encourages further activity.

Attention to detail is a key feature of the project. Even the standpipe for the circular water feature is electrically heated so that it does not freeze. The garden is lit at night and a retractable canopy gives shelter from sun and rain. Artworks of plants and butterflies decorate the glass screen surrounding the garden, which allows excellent views of the surrounding countryside and distant hills. The garden also overlooks a large car park, and the comings and goings give patients and visitors something to watch even in the winter months.

The garden leads off a new social space, which can be used by patients and carers who would like to sit in a quieter area off the main ward. A range of comfortable seating allows people to choose where they sit. Meanwhile, a dining table and small kitchenette enable people to enjoy a snack while overlooking the garden. There are plans for this area also to be used for occupational therapy assessments. Adjoining the social space is a well-equipped sensory room, where patients can choose from a range of colours, lighting and sounds depending on their mood.

When the team first joined the programme, they had proposed improvements to a ward at Macclesfield General Hospital to make the environment more dementia friendly. However, due to service reconfiguration, the project location was changed to the unit at Chester. This move presented significant additional challenges for the team, but they were able to use the initial work and consultations undertaken at Macclesfield to inform the early designs for the final scheme.

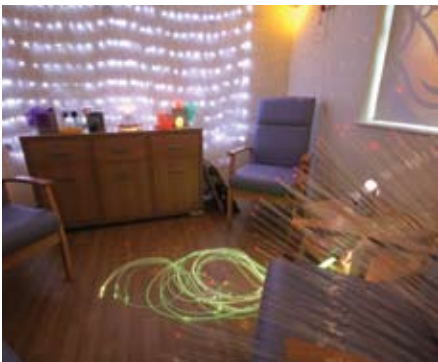
The trust has given significant financial support to the scheme. It has redecorated the remainder of the ward with accent colours, to help patients identify their rooms, with pictures of Chester and local landmarks providing a homely feel and a talking point.







***“This ward  
will be  
considered as  
a benchmark  
for all first  
floor wards in  
the trust.”***  
Matron





## Cornwall Partnership NHS Foundation Trust

**An oasis of calm has been carved out of a little-used lounge, creating a large, welcoming indoor–outdoor social space, enabling people to eat al fresco or stroll through the newly planted garden**

***“We have held engagement events and fundraising activities in order to ensure that the environment created was one that met the needs of this very special patient group, their families, relatives and carers.”***

Matron

Garner Ward was built in 2001 as part of a private finance initiative (PFI) extension to Bodmin Community Hospital, providing assessment and treatment for people with dementia. Carers and patients tended to group themselves near the busy ward entrance rather than using the other social spaces in the ward. As a result, this area was very busy and noisy, and did not provide a calm and welcoming space.

The EHE team identified an area at the other end of the ward, previously little used as a lounge, as a potential space where a welcoming environment could be created for carers and patients. As their plans developed the team enlarged the scope of the project to incorporate the sensory room that overlooked the courtyard garden and the garden itself.

A new glass canopy has partly enclosed the external area providing a sheltered space for meals, activities or simply for enjoying the elements. This canopy, combined with the surrounding floor-to-ceiling glass walls, suffuses the whole area with natural light, even on a dull day. The garden area is easily accessed through sliding glass doors from both sides of the lounge, providing a circular indoor–outdoor pathway. The raised beds in the redesigned garden are planted and maintained by patients, and there is also a summerhouse from which they can enjoy the garden.

The main area has been designed so that people can see the entire space when they enter and then choose where to sit. Wood-effect flooring ensures a non-clinical feel, and the new lighting scheme can be adjusted as required, with a natural colour palate, in browns with turquoise accent walls, creating a sense of calm. To ensure choice, the team chose furnishings with great care, including Lloyd Loom chairs, reminiscent of furniture that many patients would have used in the past.

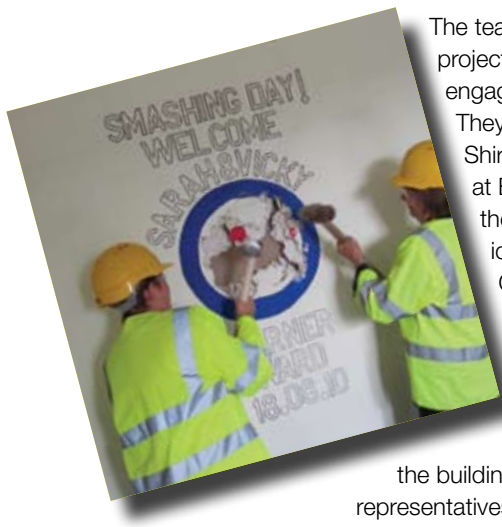
The team also sourced local pictures, and college students provided mixed-media artworks. One corner features artefacts reflecting Cornish themes, and there is a wide range of books available on the open shelves, to aid conversations between patients and their visitors. Relatives can use the kitchen area to make drinks and snacks to enjoy with their loved ones.

The trust provided significant additional capital for the project, supplemented by donations from HRH The Prince of Wales, Duchy Health Charity, Bodmin Rotary Club, Bodmin Inner Wheel, Fowey and Mevagissey Ferry Company and The Bodmin Quilters. Numerous donations from carers and relatives also contributed to the success of the scheme.

The team wanted to use the project as an opportunity to engage the local community. They held an early event at the Shire House, the town hall at Bodmin, to help shape the designs, and gathered ideas from visitors to the Cornwall Show. They were keen to keep all their supporters in touch as the scheme developed, and organised a ‘Smashing Day’ to mark the start of

the building works, which enabled representatives from the local community to see the first wall brought down and find out more about dementia care from staff.

The area has been redesigned to provide a large, open and welcoming U-shaped social space, complete with a kitchen area.





***“This has been an amazing journey. We have received such interest, encouragement and support from our local community.”***  
Ward manager

***“One valuable lesson we have learnt is that you really do need to shop around. A local company gave us a quote for the furniture, but by going to the manufacturer direct we were able to save an awful lot of money.”***  
Team leader



### Cumbria Partnership NHS Foundation Trust

**Improved lighting, new flooring and colour-coordinated wallpaper help with orientation, while seating is arranged in homely clusters, to help people feel secure and comfortable**

***“I could not have envisaged the impact on orientation of lighting, décor and furniture. It has been an utter revelation.”***

Carer

Gill Rise is a 15-bed dementia assessment unit that covers a semi-rural locality with a large and growing population of older people. The team wanted to create a more supportive and therapeutic environment that would support person-centred care, promote independence and increase patient wellbeing, through improvements to the entrance, corridors and main social space.

An initial challenge was to redesign the entrance to the unit. The main doors were electronic and opened outwards, making entry very difficult – especially for people with reduced mobility. The entrance has been redesigned to provide a light, spacious and welcoming first impression, with an open and accessible reception desk. Bespoke glass screens, decorated with poems and words chosen by patients and carers, create interest for those sitting in the comfortable chairs.

Internally, changes have been made to the corridors to help people find their way around the unit, with improved lighting and flooring and wallpaper in different colours to help with orientation. The team also used coloured accent panels next to each bedroom door, with large numbers to help patients find their rooms.

Patients and carers have been integral to the scheme. The team involved them in discussion groups to inform the choice of colours and decide what artworks to commission. The team had to brave the trust’s ‘Dragon’s Den’ in order to secure the £10,000 funding for the commissioned artworks that decorate the corridors. These depict two themes: on the men’s side of the unit, the artworks capture some of the local industrial heritage, while on the women’s side they depict a series of well-known cartoon characters.

The large area comprising the main day and dining space has been subdivided so that seating is arranged in smaller, more homely clusters, offering patients the choice of sitting by the TV or in a quieter area. Small dining tables are used throughout the day, both for eating and for activities, while the old nurses’ station has been transformed into a small kitchen area, which can be used for assessments or to make drinks and snacks.

The project gave the team the opportunity to make a wider assessment of the use of the building and the configuration of the rooms. As a result, the trust made a number of other improvements to assist clinical care, and it found space to create a carers’ room, which has become very popular.

Patients are now more orientated to their environment and are less likely to feel lost. As a result, the ward is much calmer and patients less agitated. The trust made a significant capital investment in the scheme, and has already asked the team to advise on the design of its new dementia assessment units.



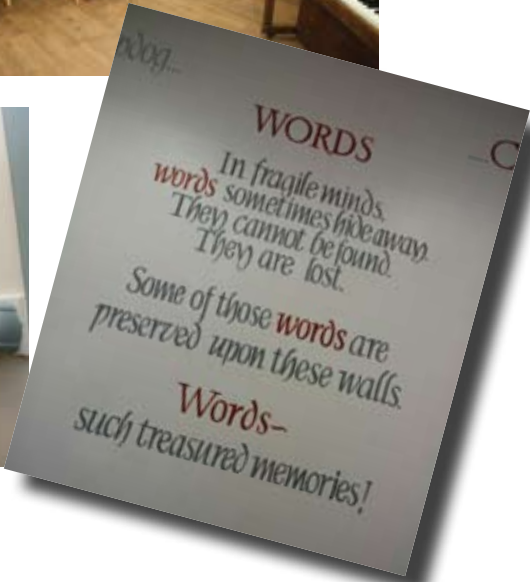




***“Patients are less agitated now that they are more orientated.”***  
Matron for older people’s mental health



***“The carers and relatives love the visitors’ room. Staff have reported relatives coming in early so that they can get in there first!”***  
Team leader





## Derbyshire County NHS Care Trust

**A noisy day space is transformed into a series of smaller, calmer areas featuring glass cabinets displaying memorabilia, while a roof garden affords stunning views of the surrounding landscape**

***“We are hoping to create a website to promote and share the artworks that have been created so far, to invite others to have a go and be more ambitious.”***

Occupational therapist

***“After losing a loved one with this illness, it is a great comfort to know that, all over the country, life is being made more comfortable with a happier environment.”***

Carer

Derbyshire County NHS Care Trust had already won a Community Care Award for improvements to the hospital environment, but it felt that more could be done to make its wards dementia friendly. The trust team embarked on two projects, both seeking to improve social spaces for patients at two community hospitals in Derbyshire.

The first site was Riverside Ward at Newholme Hospital in Bakewell. After an initial consultation, the team decided to focus on improving the large, noisy and impersonal day space, and to subdivide it into a series of linked areas. This would afford more dignity and privacy to patients, offering a choice of where to sit, eat or take part in activities. The team commissioned a model to illustrate the proposed redesign and help with consultation.

Internal partitions now divide the space into three main areas: one for watching television, one for activities and dining, and a quiet area for contemplation. The two larger partitions feature glass cabinets of memorabilia and a fish tank which is very popular and has become a focal point for conversations. Vibrant mosaics, made by the patients from sweet wrappers and newspapers, decorate each of the lower panels of the dividers. A new interactive whiteboard is used to engage patients in a much wider variety of therapeutic activities and with a quieter area now dedicated to dining, there is greater recognition of the importance of mealtimes.

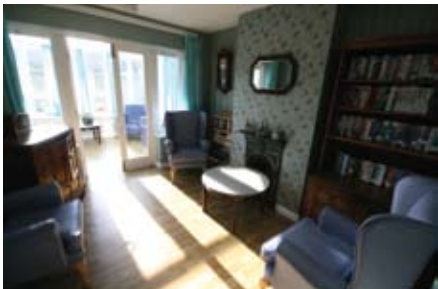
Additional capital funding from the trust funded the reception area to make a more welcoming entrance, with new lighting, greater use of colour in the corridors and rooms and a garden upgrade. Initial figures indicate that the number of falls has reduced, and patients are less agitated and engaging in more spontaneous conversation. Families are visiting more frequently. Staff engagement has increased too and there has been a reduction in staff sickness levels.

The second EHE project, which was also supported by additional trust funding, involved building a roof garden at Spencer Ward, Cavendish Hospital, Buxton. Constructed on top of a flat roof adjacent to the first floor ward, it has been designed to allow free access to a safe garden where patients and visitors can enjoy the magnificent views of the surrounding landscape. One of the ward staff designed the etching for the glass surround, the design echoing the Derbyshire hills that can be seen from the garden. A retractable canopy provides shelter from the elements, and patients are encouraged to help look after the planting.

The design of the outdoor balcony space has made it feel very much part of the continuation of the ward – particularly as the room that is used to access the garden has been refurbished to provide a flexible area that can be used for activities and social dining, including tea parties, which have proved very popular. In the course of the project, patients were shown a range of local photographs. Now, the most popular pictures are displayed along the ward corridors, rekindling memories and sparking conversation.

The team commissioned a DVD to highlight the outcomes of both projects. They have found this a very effective medium for conveying the importance of the physical environment for people with dementia across their local health and social care communities.





***“Having been involved in major projects for 25 years, this was the most worthwhile I have ever had the pleasure to be a part of. It gave us the opportunity to move away from traditional NHS thinking and allowed us to use colour, lighting and patients’ artwork in our project.”***

Capital and estates development manager

***“Now, the dayroom area is always occupied, and patients no longer sit alone, unless they have specifically chosen to do so.”***

Matron for older people’s mental health

## Devon Partnership NHS Trust

**A ward is rejuvenated with a series of sensory trails encouraging people to move around the building and aid orientation, using artworks, ‘story corridors’, colour and light**

***“For me, the most rewarding aspect of the project has been the involvement of people using our service and carers of people with dementia. Their contributions have been at the heart of our decision-making, and have helped shape the new environment. Their involvement has been both inspiring and humbling”***

Occupational therapist

When the trust applied to join the programme, it had just announced a multimillion-pound redevelopment programme for its older people’s inpatient units. The EHE project offered the team an extraordinary opportunity to influence the substantial extension of a 16-bedded ward at Franklyn Hospital, to make the environment more supportive to people with dementia. The scheme was designed around the concept of a series of sensory trails that encourage flow and movement around the building.

The team worked closely with the architect for the rebuild. At a very early stage, they decided to alter the position of the social spaces so that they, rather than the bedrooms, looked onto the courtyard garden at the centre of the ward. This would allow patients and visitors open access to the garden, and would encourage people in the day areas into the outside space.

They suggested that some small, quiet areas should be made available, with sofas, to enable visitors to sit next to their loved ones. The project process also included lively arts sessions, in which patients and staff were actively involved in felt and tile-making activities for a range of artworks. They were also involved in discussing which plants, flowers and vegetables they would like in the garden.

Today, artworks, colour, and light pervade the new building. As well as feeling calming and joyful, the space has been carefully designed to aid orientation, through clear sight lines and visual markers. Every opportunity has been used to create a choice of environment, from the larger main social space and the courtyard garden to a smaller quiet room and snug. Each of the corners in the corridors has been turned into a little seating area, based on a local theme, so that people can enjoy remembering times at the seaside, on the moor or in Devon’s rolling hills.

The team commissioned a wide range of artworks (including a map of Devon, which takes pride of place in the main day space), along with light boxes, landscapes and a tactile woodcarving panel depicting the local countryside. Staff brought in pictures of older family members in times gone by, and these now decorate the corridors. A nearby school has loaned pictures for the scheme, and the local historical society has also provided photographs. The garden has been designed to provide interest, with a variety of seating areas and a central artwork to enjoy.

Patients, visitors and staff are finding that the ‘story corridors’ and other artworks open up different ways of communicating, and patients are actively choosing where they would like to sit. When patients feel agitated, staff are able to use the different areas to better support and engage them, rather than using medication to calm them.



The ward was closed during the works, and this made communicating and consulting with services users and staff more complex. The team launched a blog to keep people up to date and used a range of consultation methods, including questionnaires, focus groups and consultation sessions. The team also met a group of former carers to discuss the scheme.





*“Seeing our patients interacting with this new environment, being able to choose between sociable and quiet areas, indoor and outdoor spaces, and listening to their stories stimulated by the beautiful artworks, it feels like we have been able to make a difference.”*

Team leader



*“It feels so welcoming, and everyone seems so calm.”*

Carer

*“I liked the little lounge – nice and quiet, and the snug with the fire and sofa. It was nice to sit in there with my lady friend.”*

Gentleman with dementia





## Dorset HealthCare University NHS Foundation Trust

**A carefully chosen design helps patients navigate the ward more easily, while beautiful light boxes and bespoke glass panels provide a light, airy ambience**

**“Throughout the process, we wanted to ensure that our project remained local and personal and didn’t become a ‘one size fits all’ solution. We also wanted to make sure that we conveyed the message that you can do a lot with not very much money!”**

Addictions services manager

**“Patients, carers and staff love the changes.”**

Team leader and specialist nurse practitioner

Before the team joined the EHE programme, the trust had already done some work to improve the general environment of St Brelade’s Ward, a specialist assessment ward for people with dementia, by applying research evidence on the use of colour and light, and had already seen a reduction in service-user falls. However, the ward area used by the male service users had not been refurbished, and staff felt that the lack of light and poor access to outside space were contributing to patients’ agitation and distress because it made them reluctant to use the dark dining area and the overgrown garden area beyond.

The team conducted a review of the current environment and concluded that there were multiple ‘decision points’ for male patients when moving from their lounge to the dining room, which could provoke stress and agitation. One of the key aims of the project was to remove these, so that patients could move easily between the two areas. The team carried out extensive consultation with service users and carers to inform the redesign, using workshops, colour cards, arts activities and excursions to compare different types of garden features and planting.

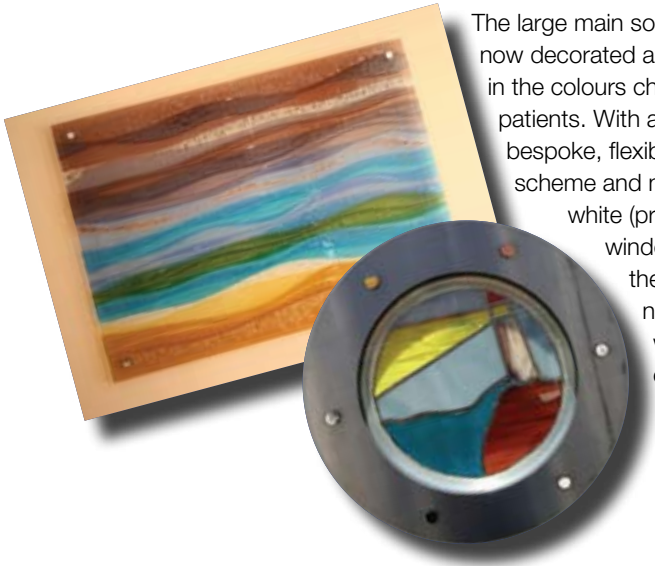
The two areas now flow into each other, and there is good visibility designed to help patients find their way around and to make it easier for staff to observe. The team has also installed a high-quality, heavy duty, soundproofed folding door, which enables the two spaces to be separated when required, allowing for great flexibility of use. Half-height, curved walls have been incorporated in the design of the lounge area to make the whole area feel less institutional, and the new furniture allows people a choice of seating.

The area is decorated with beautiful light boxes and bespoke panels made of fused glass that is toughened and laminated. The complementary colours reflect the choices made at the service-user workshops.

The garden area has been transformed into a welcoming space, with white rendered walls that reflect the light. Wooden benches have been set into alcoves in the retaining wall of the raised beds that patients will plant out with specially selected non-toxic plants. Red, blue and yellow sails provide shade and shelter, their colours echoed in the ‘beach hut’ for storing garden implements. A water feature and bamboo planting introduce pleasant sounds into the garden, while a feature sculpture provides tactile interest. The area is enlivened by a white fence with inset glass portholes depicting local seaside scenes and mosaic murals made by service users.

The scheme has enabled patients to be more independent. It has reduced slips, trips and falls and has encouraged a wider variety of activities for service users, including therapeutic activities in the garden. The team are already sharing their experiences across the health and social care community.

The large main social space is now decorated and furnished in the colours chosen by the patients. With a newly installed bespoke, flexible lighting scheme and newly painted white (previously brown) window frames, the whole area now feels more welcoming and calming.





***“I have an overwhelming sense of pride and achievement to have been part of something that has been received so well and has truly made a difference to the service users.”***  
Senior occupational therapist

***“This is so good. My husband has always enjoyed gardening, and will be keen to be out there.”***  
Carer

## Hertfordshire Partnership NHS Foundation Trust

**A dark and unwelcoming entrance and reception area are transformed into a welcoming space, brimming with natural light, with social spaces that are easy to navigate and comfortable seating placed at natural stopping places**

***“Residents like to sit quietly listening to music in the communal seating area.”***

Secretary

***“The bright and airy building allows light to flow through.”***

Deputy ward manager

Hertfordshire Partnership was one of two trusts awarded an EHE award in 2010 to mark the tenth year of the EHE programme. The aim of this project was to redesign Elizabeth Court – a 27-bed unit – to ensure that service users with dementia, their families and staff felt safe, confident and valued. The team wanted to create an innovative and healing environment by improving the main entrance and reception area and creating a series of interlinked social spaces. They hoped that transforming the environment would provide users with a more positive experience and would reduce incidents of challenging behaviour.

Through consultation with service users and carers it became clear that first impressions of the unit were not very favourable. The overgrown planting outside made the entrance dark. Inside, the very small seating area and offices were congested and confusing.

The team decided to move the front entrance to allow better access, and have replaced the old bushes with lower-level planting and a good handrail, to guide people to the door. Inside, the old offices have been removed and there is a clear view of the main social space and the garden beyond. Staff work in a new, open reception and office area, with the option to use a private meeting room when needed. New seating has created a comfortable waiting area.

Glass is used extensively in the social spaces to maximise light and aid legibility and orientation. The large day area can now be partitioned when required, and has been refurbished, with chairs arranged in smaller, more familiar groupings, as people would find at home. A fireplace with a faux fire provides a focus to the room and has become a very popular seating space. The room has become a focus for socialising, dining and a range of daily activities, with an additional room provided for family visits or for service users to sit on their own. A selection of artworks reflect the locality, and a cabinet with items of memorabilia offers additional interest.

Service users had always enjoyed sitting at the ‘crossroad’ area between the bedrooms and social areas, so the team redesigned it as a comfortable seating area. Light tubes have brought in much more natural light, helping to promote normal sleep–wake patterns. In the evenings, they can enjoy a constantly changing cloud-like ceiling of LED lights and a range of different styles of music.

The transformation of the unit has also improved staff morale and recruitment, and staff are now requesting additional training to help them care better for their client group. The relatives support group was very involved in the project, and the group has expanded and become more involved in the day-to-day life of the unit, including maintaining the garden. The support group helped to raise funds, by organising a sponsored walk, and developed links with a local garden centre and churches in the area. During the building work, staff encouraged visitors to take service users out on excursions, and these visits were so beneficial that they have now become a regular feature of life at Elizabeth Court.





Before



***“Our relatives support group is very active, and they are passionate about maintaining the feel and appearance of the unit.”***

Deputy ward manager





## Humber NHS Foundation Trust

**An outdated clinic building is transformed into a comfortable drop-in facility with a welcoming waiting area furnished with backlit glass artworks and carpet especially designed to aid wayfinding**

***“Everyone who enters the building comments on how nice the environment is.”***

Clinical psychologist

***“Having the opportunity to speak at local schools and events felt like we were really going to make a difference for people with dementia. I have really enjoyed the fundraising, and I have been moved by the kindness and generosity of local people.”***

Team leader

***“My involvement has given me a voice to change things for people with dementia and their carers.”***

Staff nurse

The Hull Memory Clinic is based in an old community day hospital, located in a residential road of Victorian houses now primarily occupied by students and a transient population. The exterior of the building was foreboding, with locked metal bars over the windows and barbed wire on the guttering. It was not a surprise to staff that many patients who were referred for memory assessment chose not to visit the clinic, and it was very difficult to recruit reception staff.

The team came up with an idea to transform the traditional internal environment by redesigning the waiting area and large central space, to make a more comfortable drop-in facility. The area would offer easy access to multimedia information on dementia care as well as showcasing modern technologies that can support people with memory-related problems. The initial consultation focused on asking patients and relatives what they would like to see in the space. The team then drew up plans and carried out further consultation, which led to some adaptations of the draft designs.

Today, the dark, cluttered entrance and reception have been removed, and people are now greeted with a comfortable, spacious waiting area with clear views of a large, open reception desk. This allows the receptionist to see the entrance as well as the larger seating area and offers reassurance to service users while they are waiting.

The main area has been transformed using a colour palate of browns and reds. The lighting has been improved, and the design incorporates the building's structural features such as the pillars and high windows, to make them feel part of the whole. Along one wall sit a series of bespoke 'pods'. When they are closed, they look like a row of cupboards. But they open to reveal four resources: information on assistive technologies; internet access for patients and relatives to look up information; a TV screen for training and presentations; and a drinks machine.

A new carpet helps ensure intuitive wayfinding and delineates the seating area, where chairs of different heights have been placed in small clusters so that patients and visitors can select a comfortable spot.

After the initial consultations, patients became involved in producing stunning glass artworks for the scheme, which are used in backlit panels between the pods and along internal windows on the opposite wall. Patients, carers and staff are continuing to contribute to a changing exhibition of artworks in a new gallery area.

The clinic rooms have also been improved, using accent colours and artworks, and the central space can also be used by community groups for meetings and training. For the first time, the service has successfully recruited permanent reception staff, and patient attendance has improved.

The team was extremely proactive in engaging the public, local groups and schools in the scheme, through a launch event, newspaper articles, local radio and fundraising activities. A result of the project, friends and relatives have formed a charity to support the ongoing work of the Memory Clinic.





**“One of the biggest knock-on achievements has been the forming of the Friends of The Hull Memory Clinic. The group will continue to give the users of the clinic a voice and ensure that the feeling of ownership will continue into the future.”**  
Carer



**“Being part of the EHE project has inspired me to become active in helping families who are affected by dementia. Without my involvement in the EHE programme, and the support of the staff, I am sure these opportunities would not have occurred to me or that I would have had the confidence to pursue them.”**  
Carer



## Ipswich Hospital NHS Trust

**A team refreshed a cluttered complex care medical ward by replacing the nurses' station with a reception desk with comfortable seating and used colour to aid wayfinding**

***"I really like the colours and pictures. It makes you feel much more cheery!"***

Patient

***"What a difference a splash of colour makes! It looks very peaceful and inviting. And what is this? A reception desk, for all the world looking like a hotel reception desk and not like a nurse's station surrounded by staff."***

Chair, Ipswich Hospital User Group

Having won a place on the EHE programme, the trust decided to run an internal competition to choose the area in which to carry out its project. The trust felt that maximum impact could be made by focusing on one area, so the team could then spread learning across the trust. The selected area was Haughley Ward – a 27-bed complex care medical ward for which an estimated 75 per cent of patients had some degree of cognitive impairment or dementia.

A launch event was held for a range of key stakeholders, who were later involved in a wide consultation, along with many community groups, to inform the ward redesign. The main project aims were to support increased patient wellbeing while reducing negative stimulation.

The ward is of a traditional nucleus design, with a mix of six-bedded bays and single rooms, and a staffing area in the middle, facing two of the bays. The ward entrance was dominated by a large nurses' station which people felt was cluttered, crowded, noisy and unwelcoming to visitors. It was also difficult to navigate, and harsh lighting around the central ward area caused light pooling. This can make it difficult for people with dementia to walk around, as they may perceive dark areas as a change in level that they need to step over.

The central focus for the refurbishment was to redesign the area and replace the nurses' station with a reception desk with integral seating and storage for oxygen cylinders. Seating was a priority because the day room off the main spur corridor to the ward was little used.

Installing a smaller reception desk had a dramatic effect, with first impressions now being of a welcoming, uncluttered space. The harsh lighting has been replaced with daylight bulbs, which make the whole space much brighter and more inviting. The sofa is used frequently, and patients enjoy relaxing and looking at a large, commissioned photograph of a peaceful Suffolk country garden.

The garden theme was also applied to the improvements for the bed bays and single rooms. A variety of bright accent colours have been used for each space, and each door has been decorated with a different easily recognisable flower, on both sides, to aid wayfinding. Meanwhile, matching coloured flooring strips help guide patients from the larger bays to the toilets, which now have larger signage. People have greater privacy and dignity thanks to opaque film decorated with flower images, on the internal windows to the large bays.

The team recognised that to create a more person-centred environment, the environmental improvements needed to be accompanied by a shift in culture. Some staff were apprehensive about the plan to remove the nurses' station as this would bring about significant changes in practice – particularly when writing up notes. However, the ward receptionist has helped support these changes, generating ideas and finding new solutions.

The project has produced a cost-effective template for redesigning the other nucleus wards in the hospital, and has also given a focus to other trust-wide initiatives to better support patients with dementia.







***“If we could only change three things, these would be: signposting using accent colours, creating a central social space, and improving the lighting.”***

Senior nurse, dementia care and adult safeguarding

***“The programme successfully tapped into my vocational nature, reaffirming why I work in the health service by making me view the environment from a person with dementia’s perspective.”***

Estates technical development manager



## King's College Hospital NHS Foundation Trust

**Patients can easily find their way to their beds in this newly refurbished ward thanks to a floral theme, with a different flower denoting each bed bay and room**

***“At Christmas time, we had Rosa’s room scented with cinnamon and a crackling fireplace displayed on the wall – this was a great success with patients, staff and families!”***

Activities co-ordinator

***“The programme has translated into tangible benefits for our patients and our organisation, both through the direct funding for improving the environment, the training and support it has provided, and the motivation it has given us to do the impossible.”***

Nurse consultant for older people

Initially, this project planned to convert a disused ward storeroom into a multi-sensory and activity room for people with dementia, as well as providing some portable sensory equipment to use in the ward (which is part of the Health and Ageing Unit). However, as the project took shape, the team decided on a much more ambitious scheme, with significant financial support from the Friends of King’s to redesign the whole ward, to make it more dementia friendly.

The team selected design themes following extensive consultation with patients, carers, staff and local community groups, including the Alzheimer’s Society and the Dulwich Picture Gallery. They then appointed a design team and lead artist for the scheme, and the gallery worked with patients, carers and staff to create a quilt, on the theme of ‘urban jungle’, which now hangs at the entrance to the ward.

The ward corridors have been de-cluttered so there are now clear sight lines, and new wood-effect flooring has made the area feel welcoming and spacious. The different elements of the scheme are tied together by a range of commissioned artworks, with large pictures of the London skyline in the corridors based on views that can be seen from the ward windows. The team chose a modern flower theme for the

artworks that denote the entrances to the bed bays and single rooms and for the panels that hang above the beds. Each combines a different coloured flower with the bed number, with the colours echoed in the accent walls and blinds for each bay.

Signage has been improved, with yellow signs denoting bathrooms and toilets, while signs to staff areas complement the artworks. Clocks are now hung in each of the bays and rooms, to help with orientation, new handrails encourage mobility, and patients enjoy using new small seating areas near the main ward desk and near the lift lobby. Tactile boards in the corridor encourage walking and interaction, and atomisers have been placed around the ward to emit subtle, calming aromas.

An audit showed that the dayroom was being used more by staff than patients. It has now been replaced with a sensory room renamed ‘Rosa’s room’, after a lady who had left a donation to the Friends. Entry is via a new door with large glass windows. The all-white walls enable patients to choose from a spectrum of coloured lights, smells, images and activities. The sensory equipment is installed in a large cupboard to avoid detracting from the clean, uncluttered design, and a projector enables images to be shown on the walls. Seating is comfortable and homely, and there are plenty of books, photographs and items of memorabilia for people to enjoy. The winning picture from a staff competition has pride of place on the wall and is much enjoyed by those attending the new lunch club.

A Christmas opening allowed everybody to join in the carols and celebrate the completion of the scheme. The team members have received national recognition for their work, winning the neuroscience nursing award at the prestigious British Journal of Nursing Awards 2012. Visitors remark on the calmness of the refurbished ward, patients feel safer walking on the new flooring, and many of the student nurses say they are keen to return once they are qualified.





***“This project has put great value on the role of the environment in the aspect of healing – not only in me, but in other nurses in the health care team.”***  
Dementia nurse

***“Don’t hesitate – go for it! Launch day is likely to be one of the proudest days of your life. The ongoing positive feedback from patients, carers, staff and visitors makes the hard work worthwhile.”***  
Dementia specialist nurse





## Leeds and York Partnerships NHS Foundation Trust

**Meal times have been transformed into an opportunity to relax and socialise in a new dining area with clotted-cream walls and burnt orange accent colours**

***“Dramatic changes can be made without spending huge amounts of money.”***

Unit manager

***“There have been huge benefits to the staff team in terms of morale, and the feedback we have received from patients, carers and managers has been very positive.”***

Team leader

The Meadowfields Unit, built in 1996, provides 18 beds and day care services for people with dementia. Most patients are admitted for assessment, but patients may stay in the unit for several months.

The project aimed to improve the dining room to encourage better use of the space and support improved nutrition. This rather dated, dark and uninviting room was only used at mealtimes when it was dominated by large, noisy regeneration trolleys. This did not encourage people to eat, and the whole atmosphere was very unsettling, which staff felt contributed to some instances of challenging behaviour. It was also difficult for staff to prepare hot drinks or make toast, because the dining area and kitchen were separate.

The team took up the fundraising challenge, and thoroughly enjoyed consulting and engaging the local community in the scheme. Fundraising activities included an Egyptian dance night, a sponsored walk and a series of popular music afternoons. These activities gave staff, relatives and carers a chance to relax and socialise together, which was a great bonding experience.

effect flooring and gentle clotted cream-colour walls, with burnt orange accent colours, have made the space much more welcoming and less institutional. Larger, square tables enable staff to sit with patients who need help to eat. They also seem to be helping patients to better understand their space and to reduce potential conflicts at mealtimes. There are two small, relaxing seating areas, together with a drinks machine, so that visitors and patients can use the space informally during the day.

Two large, floor-to-ceiling images of York are displayed on the main wall between wood-laminate cupboards that help keep things tidy. One of the doors slides back to reveal a television that can be used for film nights and communal events. Images of the city are transposed onto glass film on the lower windows, to screen the view of the adjacent car park and improve privacy for patients.

Enlarging the kitchen presented a number of technical challenges, including the need to work around a large service-carrying pillar. However, once these were overcome, the result was a large space with room for the regeneration trolleys and a wide hatch and door through to the dining room. The kitchen door to the corridor now has a large vision panel, to improve access and visibility. The increased space and new equipment means that patients can now also enjoy cooking as part of their rehabilitation, and group baking sessions are proving popular.

Following the theme of ‘old York’, a number of large-scale images are now displayed around the newly painted unit corridors. Together with the use of accent colours, these aid patients’ orientation and help with wayfinding. The photographs have proved very popular with patients, who are enjoying taking friends and family to look at their favourites.

Now, the main dining area has been transformed and modernised with the use of colour and a new lighting scheme. Wood-





Before



***“Being involved and actively doing something positive for the ward that was caring for my mother helped me to cope with the emotional impact of her decline.”***  
Carer



***“On a daily basis we see the most fabulous, positive results created by the new environment.”***  
Clinical nurse leader



Leicester Partnership NHS Trust

Inpatients with dementia who are receiving palliative care can now be cared for in a new suite called the Oak Room – a care environment that is light, supportive and calming for patients and their loved ones

**“The project was hard work and stretched us in terms of what we could achieve. It has been, however, a brilliant experience. The end product has produced something of real worth both to patients and relatives.”**

Team leader

**“An unexpected highlight and honour was to be selected by The King’s Fund to present to Prince Charles at Clarence House.”**

Head of operational estates

Following an audit, the trust had identified that a significant number of patients with dementia admitted to the older person’s assessment wards at the Evington Centre died during their stay in hospital, as a result of their complex physical illnesses. These patients had to be cared for in the single bedrooms on the ward, which afforded little privacy or space for visitors, and could be very noisy.

The project aim was to develop a self-contained suite for these patients. The team identified a bedroom, storeroom and bathroom, together with an adjacent outdoor space at the quiet end of Gwendolyn Ward (the largest ward in the centre). They then began an extensive consultation with patients, relatives, staff and carers groups.

The new suite is called the Oak Room. The oak is a symbol of strength, maturity, renewal and hope, which seemed fitting for a facility for people facing personal challenges and uncertainty about the future. The choice of a special name and logo for the suite gave it an immediate identity, which supported the team’s awareness-raising activities in the trust and the wider community.

It became clear that additional funding would be needed for the scheme, so the team planned a series of activities. The most ambitious of these was a sponsored motorcycle ride taking in all four countries of the United Kingdom in a day, raising more than £5,000.

The new design offers a care environment that is supportive, light, welcoming and calm. A large mosaic of an oak tree sits outside the suite. The bedroom has been equipped with special furniture, including an adjustable bed that is clinically appropriate while giving as homely a feel as practical. The en suite bathroom has been designed with the needs of people with dementia in mind, using rails in contrasting colours, with traditional bath and sanitary ware. At the other side of the bedroom, an alcove provides comfortable chairs for relatives to rest or nap and a kitchenette for making snacks. The walls are decorated with artworks of local landmarks.

From the bed, patients can see through the French windows to a private garden. If they wish, their bed can be moved outside, beneath a protective canopy, to enjoy the fresh air. The design incorporates planting, in raised beds to be accessible to people using wheelchairs, to provide interest throughout the year. Even in the winter months, patients can enjoy the commissioned glass artwork that provides a focus to the garden.

The trust developed an operational policy for the suite and formed a new partnership with the local hospice that is providing enhanced palliative care training for the ward staff. The project has raised awareness of death and dying within the dementia care service. Meanwhile, the team members are using their learning to inform further projects in the trust and are disseminating their achievements more widely through presentations and articles.







***“The project has given us knowledge and skills about environment that have been extremely valuable, and that we have continued to use to develop other areas.”***  
Ward manager



## Lincolnshire Partnership NHS Foundation Trust

**A mental health unit entrance, once confusing and cluttered, becomes an inviting space to provide a welcoming first impression and a comfortable space to wait for appointments**

**“The new area is a shining beacon to what can be achieved though limited finance.”**

Community building manager

**“It is so nice to hear the appreciative comments from the service users who remember how it was before the makeover. What a huge difference it has made.”**

Receptionist

When the trust applied to join the EHE programme, plans were already under way to improve the entrance to Witham Court – a mental health unit. The trust also recognised that the outpatient reception and waiting area adjoining the main entrance were cluttered and confusing for patients – especially for those attending their first appointments. So, the team took the opportunity to reconsider the whole area, from the new entrance doors to the waiting area, in order to create a welcoming first impression and space where people could wait for clinics in comfort.

As the team developed its plans, the new entrance was in the process of construction. The lobby between the two sets of glass doors was redesigned to provide an open reception hatch and additional seating for people waiting for transport.

The design incorporates a new lighting system and bold, warm colour palette to make the waiting area inviting. Meanwhile, specially designed wood-effect flooring helps guide visitors through to the seating areas. The team trialled furniture with patients and staff and, following discussion with the manufacturers, raised the height of some chairs to make them more comfortable for people with restricted mobility. Seating is now arranged in small clusters and a new drinks

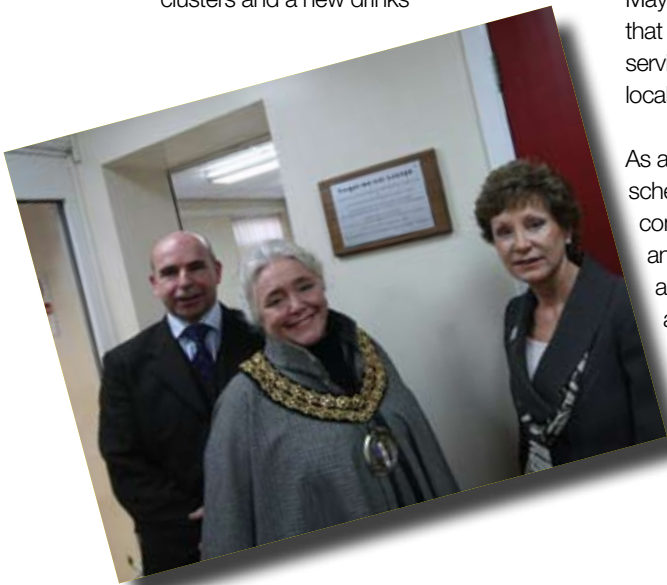
machine installed so that people can access refreshments at any time. An alcove, created by incorporating space from a next-door room, provides a more private waiting area.

Students from the interior design course at the local university were approached to provide sepia photographs depicting buildings in Lincoln that patients are likely to recognise, including the famous ‘Lincoln imp’. To help with reminiscence activities, the photographs have also been reproduced in a book format for people to look at while they are waiting. A large artwork and clock in complementary colours also decorate the walls.

As a result of the scheme, the trust has established a group of volunteers who, as well as working in the wards, provide a welcoming service for patients and visitors in the outpatients department. They not only help people feel more at home but can also answer initial questions about the service and provide refreshments, as well as pointing out the many freely available advice booklets.

The area has been renamed the Forget Me Not Lounge, and a commissioned artwork depicting the flower now welcomes visitors to the unit. Many members of the local community attended the opening by the Mayor of North Hykeham. The trust hopes that the area will become a drop-in facility for service users and community resource for local groups in the future.

As a result of the success of the EHE scheme, the rooms used for clinic consultations have been reorganised and upgraded using accent colours and artworks, and the trust is now planning additional refurbishments to the dementia care ward at Witham Court.





Before



***“Being asked to participate in the project was much appreciated as this gave recognition that there was the potential for volunteer involvement.”***  
Volunteer services manager





## Mersey Care NHS Trust

**A courtyard garden forms a new focal point for a dementia care assessment ward, with paths suitable for walking and wheelchairs, a small allotment for growing produce, and space for group activities and performances**

***“I found the consultation with service users highly inspirational.”***

Matron

***“We developed ‘visual mats’ that gave service users the opportunity to tell us what they wanted in the garden by picking pictures of plants and garden items”***

Service user and carer lead

The team had originally planned to focus on redesigning the large central space in the dementia care assessment ward, located on the older part of the Aintree Hospital site. But then, following a service review, the trust decided to move the service to a newer ward block at the other end of the site. This move gave the team the opportunity to redesign a courtyard garden for service users with dementia who would now be cared for in the newly refurbished ground-floor ward.

The team ran consultations with service users and carers to establish the design for the garden. The groups voiced two clear requirements: a water feature and activities area. The team appointed a designer for the project. The design had to incorporate a large fire escape from the upstairs ward, which could not be removed, and an existing enclosed outdoor area for families from another downstairs ward.

The final design has maximised all the available space to provide a garden full of interest, with features designed to support relaxation and engagement in outdoor activities. Level paths are suitable both for walking and for those in wheelchairs, with a figure-of-eight route taking people past the flowerbeds. Areas within the garden have been zoned for particular activities, including a small allotment (complete with shed) where vegetables and fruit can be grown in beds constructed from old railway sleepers. There is also space for group activities and performances.

The family area for the other ground-floor ward has a new bright pencil-effect fence made by a local group. The courtyard’s original central tree had to be removed, but height has now been introduced through the raised central beds, which already contain some mature planting. The fire escape is providing a trellis for climbing plants.

Planting has been chosen to provide year-round colour, with additional interest provided through poems (developed during workshops with service users) and artworks depicting local scenes. The water feature has pride of place, and external lighting ensures that everybody can enjoy the garden in the evenings.

Inpatients have direct access to the garden from the ward lounge areas, which lead onto a paved seating area. Different-coloured paving (sandstone for the women and grey-blue for the men) is used for each area to make them easily identifiable. There is plenty of seating to offer people a choice of which part of the garden to enjoy, while gazebos offer protection from sun and rain.

The opening of the garden was celebrated by patients, carers and staff who were entertained by a local opera group. As it is possible that the service may move again in a few years, the design process gave much thought to ensuring that as much of the garden as possible can be moved to the new location.





Before



**“Do not underestimate the power of service users – they have a powerful voice.”**  
Matron

**“The importance of service user engagement and the power of their voice – we were able to use different equipment and furniture because it was what they asked for.”**

Lecturer practitioner, dementia

## Poole Hospital NHS Foundation Trust

**This redesign focused on recovery, reducing anxiety, improving appetite and sleep through an attractive design that incorporates colour-coded bed bays, photographic artwork and improved wayfinding**

***“Be prepared to become passionate about your project! It’s amazing how important it becomes to you. Enthusiasm and passion really help drive the project forward.”***

Team leader

***“I am extremely proud of what we have achieved. The ward is a triumph, and I hope that our ideas will be used throughout the hospital to carry on our good work.”***

PPI representative

Initially, the team decided to concentrate on improving the single rooms in this 24-bedded medical ward, although it hoped also to make some improvements to the bed bays. However, following discussions and the launch of its ‘Dignity in Dementia’ campaign, team members decided to seek additional capital funding from the trust to enable them to improve the entire ward.

The redesign centred on the importance of nature, art, decoration, colour and light, and the impact that these can have on recovery, on reducing anxiety, and on improving appetite and sleep patterns. Part-way through the project, the team members decided to change their designer because they felt their original choice was not able to interpret their brief. This was a brave decision, and happily they appointed another designer, who saw the project through to completion.

After consultation, the team identified four themes for the scheme, each linked to the local area, including countryside and seascapes. They then chose photographic artwork to reflect these themes and provide points for discussion and reminiscence. Colours were chosen to reflect each theme, and these were then used as accent colours to aid orientation and create a calming, therapeutic environment.

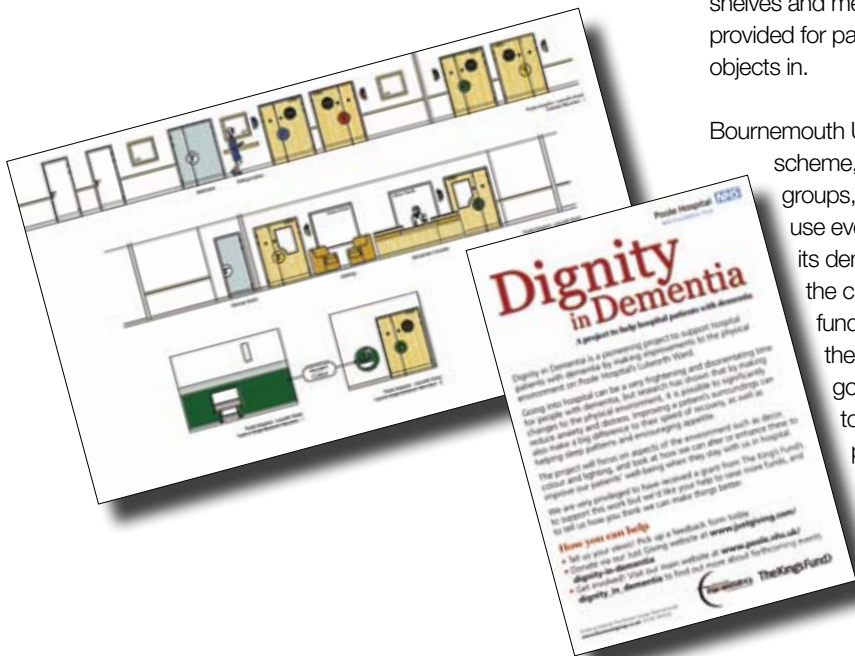
Natural wood-effect flooring is now laid throughout the ward, providing a lighter and more open feeling, while new lighting allows staff to adjust lighting levels as required. The approach to the ward has been de-cluttered and visitors are now greeted by a beautiful floor-to-ceiling image of a bluebell wood.

The nurses’ station has been replaced with a smaller welcome desk, with a comfortable seating area behind, showing visitors clearly where to go when they first enter the ward. An underused bathroom has been redesigned as a recessed storage area for notes and equipment. This doubles up as a small workstation for clinical staff, while dropdown desks are provided in the ward for staff to write notes.

Each bay has been colour coded, with the same shade used for circles on the doors, panels between each of the beds, tabletops, accent walls and blinds. Sliding panels allow staff to hide patient details above the beds when these are not required, protecting confidentiality and promoting dignity. New, larger glass panels in the doors allow patients to see where they are going.

All the toilet doors have been painted yellow and have text and picture signage to aid wayfinding. The colours used inside the rooms are reflected in the door surrounds, shelves and memory boxes that are provided for patients to put their favourite objects in.

Bournemouth University contributed to the scheme, along with many community groups, and the team continues to use every opportunity to publicise its dementia services through the campaign and associated fundraising. The trust now sees the ward as an example of good practice, and will use it to guide future refurbishment programmes.







Before



***“The newly designed ward is already making a huge difference to our patients and staff.”***

Head of communications

***“This project has really enabled me to adopt a ‘can do’ attitude with regard to putting forward new ideas within the workplace.”***

Occupational therapist



***“I couldn’t believe it when I saw it. It’s like going into a posh hotel. It cheers people up no end.”***

Patient



## Rotherham, Doncaster and South Humber NHS Foundation Trust

**A dull garden is transformed into a vibrant space, with year-round colour, a water feature, artworks that change to reflect the seasons, and a theme reflecting Doncaster's heritage**

***"I have learnt a lot about dementia and the basic principles of how to create an environment suitable for patients with dementia. The King's Fund has opened my eyes and given me a drive to achieve greater things through effective design."***  
Environmental manager

***"Leading this project has provided me with a chance to see through a complete project from beginning to end. I have got to know people in the trust I might never have had contact with, and have learned so much more about their contribution to health care in a very broad sense."***  
Team leader

For some time, the trust had recognised that the courtyard garden at Windermere Lodge needed renovation. The planting was dull, there were many trip hazards, due to uneven block paving, and an area at the back of the space was blocked off. As a result, patients in this 20-bedded assessment unit for people with dementia were unable to freely access the outdoor space. The EHE programme presented a real opportunity to provide a dementia friendly, therapeutic sensory garden that could be used throughout the year.

The team decided to engage garden designers to work with them on the redesign and chose a theme of 'Doncaster's heritage'. Patients, carers and staff were invited to attend consultations and contribute ideas, the most popular one being a water feature. The team also decided to reassess the entrance to the garden – a flashpoint for challenging behaviour, which was opposite the main staff and visitor entrance. They decided to close it up and reinstate the original entrance to the building, which was outside the ward. This had been out of use for some time, and the team had to raise additional funds to bring the entrance back into use.

The chosen garden design has maximised the available space and opened up the far end of the garden to provide a quiet seating space. The design was informed by the concept of a journey, with returning paths, alongside sounds, sights, smells and tactile objects. High-quality construction has ensured clear sight lines from one end of the garden to the other. Echoes of local industries are found in the use of railway sleepers, metal trellis' and the large steel water feature that has a central position in the garden. To add interest, some of the sleepers are topped with pictures of flowers and objects, which are changed to reflect the seasons and ward activities.

The plants have been carefully chosen to provide interest throughout the year, and the curved central beds have been raised so that patients can help look after them. The beds also provide the structure for the main seating area, which is covered by a large sail for shelter from sun and rain.

The new ward entrance has also been refurbished, providing a bright, welcoming, comfortable space that can be also be used for discussions and small groups, with artwork in the new glass walls reflecting the local industrial heritage. Moving the entrance has also freed up a further outdoor space for patients and visitors to access on the other side of the ward corridor.

During the project, the team formed strong partnerships with the contractors and PFI partners, and the patients greatly enjoyed watching the garden develop. The garden is now much used and funds have been set aside for another garden at a similar unit in the hospital. Plans are also taking shape for further ward improvements, including the introduction of more colour and artworks.







Before



***"I have further developed my strength of determination to believe in a vision and to reject compromise."***

Consultant nurse,  
dementia care

***"I now see things from different perspectives, and can be justly critical of environments, recognising the inextricable links between health and wellbeing and the spaces we live in."***

Team leader





## Royal Wolverhampton Hospitals NHS Trust

**A redesigned ward enables better communications between patients and staff while a newly created garden offers the opportunity to enjoy fresh air**

***“It looks cleaner and brighter – makes you feel brighter.”***

Staff nurse

***“It was satisfying to be able to use some of the skills from my previous life to the benefit of people less fortunate than myself.”***

Carer team member

When the team applied to join the EHE programme, the trust had already invested in improving the care of people with dementia in the hospital. But the team made a compelling case for a garden adjacent to the specialist ward for people with dementia at New Cross, as well as improvements to the environment in the emergency assessment unit (EAU). For many patients with dementia, this unit is their first destination when they are admitted and assessed, but the focal point was a large nurses’ station that many found busy and confusing.

The project focused on transforming the main entrance to the ward and two of the six-bedded bays. The nurses’ station was removed from outside the bed bays, creating a clear, open space, and the reception desk was repositioned to directly face those entering the ward. To keep the area tidy, the team installed cupboards behind the desk, for paperwork and necessary equipment, and visitors are now greeted by a beautiful photograph of a garden.

Each of the beds in the two bays now has a different flower image behind the head of the bed – either placed on the wall or a blind – to help patients find their beds and create a calming atmosphere. Small work pods have been installed in the bays so that nurses and other clinical staff can write their notes near the bedside. This has had the additional benefit of reducing the use of nurse call buttons, as patients can see the staff, and means that staff can see when patients

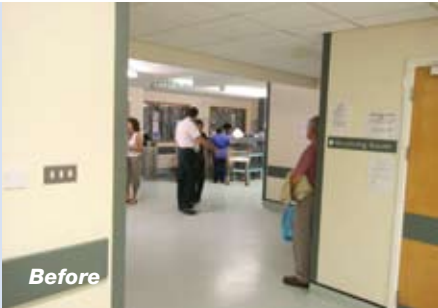
are at risk of falling, enabling them to take preventive action. Slips and trips are also reduced by improved lighting and signage to the toilets. The flower theme has also been used on film that partly obscures the internal windows to the bed bays, enhancing privacy and dignity for patients.

For the garden, the team managed to acquire two parking spaces in the car park adjoining the specialist dementia care ward. They developed the design to maximise the relatively small area while ensuring that there was space for planting, seating areas and activity. They chose low-maintenance planting, focusing on varieties that were familiar and interesting, and patients helped make the decorative mosaics and artworks. The paths are laid with a soft but hardwearing surface, to ease access for those in wheelchairs.

To help fund these two schemes, the team carried out extensive fundraising – for example, running in the local marathon and hosting a tea dance, which also attracted good local publicity.

In the assessment unit, staff now feel that they have more time to talk to patients, staff satisfaction measures have increased, and the scheme is informing other refurbishments across the trust. Since the project has been completed the team has won a National Patient Safety Award for its work. Meanwhile, patients and visitors to the specialist dementia care ward now have open access to a safe and interesting outside space. The garden has also provided an extra therapeutic space where a wide variety of activities can be carried out, including watering and pruning the plants and games, such as skittles. These activities have helped patients undertake more normal activities, aiding their orientation with the seasons and helping them sleep better at night. The garden is also becoming a favourite venue for visits and birthday celebrations.





***“We are proud to show people from all over the country around our units.”***  
Matron

***“The ward has a lovely fresh feel, and we have had lots of positive comments about the mural of the lavender garden.”***  
Ward clerk



## Sheffield Teaching Hospitals NHS Foundation Trust

**A crowded outpatient department has become a welcoming space for patients, with vibrant colours, simple signage, intuitive wayfinding and flexible seating to comfortably accommodate wheelchairs**

***“The most important tool for a successful project is excellent communication.”***  
Team leader

***“EHE allowed me to enhance and develop the skills, understanding and passion needed to create truly healing environments.”***  
Arts co-ordinator

Outpatient departments are often the busiest areas of a hospital, and nearly half a million people attend the department at the Royal Hallamshire Hospital each year. A significant proportion of these patients are aged over 65 years, many with a degree of cognitive impairment or dementia, and need hospital transport in order to attend their appointments. The main waiting area was very crowded and cluttered, with inadequate space for wheelchairs, so that patients had to wait in rows. It had not been decorated for some time, there was no central reception desk, and the signage to the rest of the building was unclear.

The team wanted to create a light, spacious and welcoming environment that provided a positive first impression of the hospital, clear waymarking to guide patients and visitors through to clinics, and a comfortable space to wait for transport home. To inform the redesign and identify key priorities, the team ran an extensive consultation, using a variety of methods, involving patients, staff and community groups as well as people with dementia and their carers. The resulting goals were to reduce confusion and clutter, create more space and comfort for those waiting, and to improve the staff workstations, as well as integrating with the newly refurbished WRVS café.

The team commissioned an artist, who helped draw on the consultation feedback to develop a colour palette of purples and greens, along with the artworks and furniture, and ensured that the various elements were coordinated. The team also worked with interior designers, who provided plans, 3D visuals and a video flythrough, which were used for presentations to potential funders, including the WRVS and League of Friends, as well as senior groups within the trust.

By blocking off one of the old external doors, the refurbishment has created one single, easily visible main entrance, which has been repainted. A large planter containing silver birch trees by the entrance and views through the glass artworks to the main seating space create a sense of welcome. Once inside, the design has maximised natural light. The main reception desk is easily visible and signage to the clinics has been simplified and improved. The project has enhanced the existing architectural features and lights over the main seating space by installing additional lighting. The new seating – trialled by patients during the project – offers the flexibility to accommodate wheelchairs, and there is a choice of different chair heights to suit individual needs. The area feels calmer and much less congested, even at busier times.

Arts already played an important role in the trust, and this was strengthened as a result of the scheme, as the team forged connections with a local charity specialising in music workshops. Now, a session is run each month in the specialist dementia ward. This ward, too, is due for refurbishment and it will be one of a number of capital schemes across the trust that will benefit from the knowledge and skills gained by the team during the outpatients project.







***“It has been a fantastic experience to have been involved from the very start to completion, helping oversee the development and ensuring the involvement of staff, patients and the public.”***  
Trust governor



## South Warwickshire NHS Foundation Trust

**A dayroom, conservatory and dining room are transformed into a series of interlinked social spaces that lead directly to the garden, with clear wayfinding and a homely atmosphere**

***“Since completion, it’s been brilliant to hear the number of compliments from patients, staff and visitors.”***

Ward manager

***“I can honestly say that we can all be very proud of the results. What was a very dark and tired dayroom has now come to life. What was a pretty but inaccessible garden has now blossomed.”***

Facilities project officer

The Nichol Unit is a 16-bedded intermediate care unit situated on the outskirts of Stratford upon Avon. The dayroom, which had not been upgraded for several years, was very institutional, with chairs arranged around the walls. It was mostly used for dining. The adjoining conservatory was little used, and patients were unable to access the garden on their own, as it opened directly onto the car park.

The refurbishment focused on these three areas, with the aim of creating an environment that was secure and relaxing yet stimulated cognitive interest. It sought to give patients a real ‘sense of freedom’ by enabling access to the space and the freedom to move between the areas as they wished. This was expected to increase activity and independence, and promote wellbeing.

The team held an open day to launch the project and carried out consultation with those in the unit, relatives and carers (many of whom visited daily) and the wider community. By involving local groups from the beginning, the team was able to engender a sense of collective ownership and commitment to see the project succeed, and to contribute through fundraising. As part of the planning process, the team visited other units and produced ‘mood boards’ to demonstrate different options for the colour scheme.

The day room and conservatory have now been redesigned, using a balance of contemporary and traditional features, to provide a series of interlinked social spaces leading directly to the garden. Each space is subdivided with curved half screens, topped in oak to give a homely feel. These allow for observation but give a degree of privacy to those who are either watching the television or dining. Accent colours denote each of the spaces, and a wave design in soft green and lilac has been used along the walls to assist with wayfinding.

The design has maximised natural light in the main internal space by installing large skylights, edged with LED lights to add interest. People are welcomed to the space with colourful glass artworks, designed by one team member who was inspired by the project to undertake this as her first commission. The redesign also incorporated a physiotherapy room and a kitchen for occupational therapy assessments.

The conservatory has been furnished with a wind-up gramophone and photographs of old Stratford. It leads directly to the main garden seating area, which provides a comfortable space to sit and enjoy the commissioned stained glass artwork and the redesigned flower beds. The garden is now fenced off from the car park, and the two central raised flower beds have been designed so that people in wheelchairs can tend the plants. There have been many positive comments about how comfortable the circular pathway made from a material containing recycled tyres is to walk on.

Staff and patients held a number of fundraising events for the unit, with further donations generously given by the Stratford League of Friends, the Stratford Town Trust, Big Lottery, Soroptomists and the Rotary Club.





***“The look, feel and atmosphere of a place is just as important in health care as practicality and function.”***  
Associate general manager





## Taunton and Somerset NHS Foundation Trust

**A redesign helps promote patients' independence, with wood-effect flooring, colour-coded areas to aid wayfinding, and text and pictorial signs on the bathroom doors**

***“Nursing staff are in the bays more often, but they are also engaging more with patients and their relatives – especially when patients are in the informal seating areas.”***

Senior sister



Sedgemoor Ward was built about 20 years ago in a standard nucleus design and cares for older people with acute and complex medical conditions. The team wanted to ensure a safer, less traumatic acute hospital admission by maintaining and promoting independence for dementia patients in the hope that this would lead to more timely discharge. In particular, they wanted to remove the nurses' station, which was felt to be cluttered, noisy and confusing for patients. They also wanted to create some social space for patients to sit away from the bedside, and to improve the bathrooms and shower rooms.

After consultation, the team chose a bold colour scheme of blue and yellow for the central ward area. A small reception desk now greets visitors to the ward, and beyond it a seating area with welcoming, bright chairs and small tables. There is new wood-effect flooring and improved lighting, and the ceiling has been lowered over the desk to add impact and definition. People can sit for as long as they like, spending time enjoying a snack from the trolley or looking at the books of local postcards that have been compiled for their enjoyment.

The ward has been de-cluttered, and now has highly visible handrails, encouraging mobility. Each of the bed bays has a small seating area away from the beds with comfortable chairs and a small table, which can be used by the patients or by staff when completing paperwork. The areas

have been colour coded to help with wayfinding, with the colours of the chairs matching the coloured panel above the entrance to each bay.

Signage has also been improved, with a new glass 'welcome' sign at the entrance to the ward, and both text and pictorial signage for the bathrooms and toilets. A new bathroom has been added in one of the bays and the showers made larger. The patients have welcomed these improvements and now need little encouragement to use the new showers.

Patients, staff, voluntary groups and members of the local community contributed to the scheme by making squares for the memory quilts. These now hang along the main spur corridor to the ward, which has been de-cluttered, newly relit and freshly painted. Inside the ward, photographs of local landmarks and familiar scenes have been hung to spark interest and rekindle memories.

Feedback from visitors, patients and staff has described the ward as having a warmer and more friendly feel, and the informal seating areas are being well used. The scheme has shown that it is possible to function without a central nurses' station and that – even when taking into account health and safety and infection control requirements – it is possible to create a non-clinical, welcoming ward environment that enhances patient care.

The trust contributed capital funding to the scheme, and kindly allowed The King's Fund to film 'before and after' scenes of the nurses' station before the project and the new seating area after completion. The video clearly demonstrates the transformation in Sedgemoor Ward, and is being widely shown to demonstrate what can be achieved in acute ward environments.





***"We wanted to create a ward environment that was warm and friendly, less noisy and busy."***  
Team Leader

***"The ward is being used as an exemplar for ward design and is being showcased as good practice by the trust board."***  
Senior Sister



## University Hospitals Coventry and Warwickshire NHS Trust

**This scheme centres on a memory lane of artworks, designed to trigger memories, and a new contemporary lounge space where patients and their visitors can spend time enjoying artworks, books and boxes of activities**

***“It was a pleasure to watch the project progress to completion. It broke the mould, and is one that I hope we can now repeat in other areas across the trust.”***

Director of engagement and foundation trust project director

***“It gave me the opportunity to work with other nurses from around the country – contacts that I have kept and have been invaluable in my current role.”***

Clinical nurse specialist, older people

University Hospital is one of the largest acute teaching hospitals in the United Kingdom, built under a PFI scheme in 2006. The decision to apply to join the EHE programme was made by the trust Dementia Care Group, which included the local Alzheimer's Society, Age Concern, Coventry Carers Centre, the mental health trust and the primary care trust (PCT). They wanted to run two linked schemes located near the older people wards, where most patients with dementia are admitted. The aim was to make patients with dementia, their carers and visitors feel valued and included in the life of the hospital.

To help launch the scheme, the team held a public consultation event in central Coventry. Attendees produced a series of mood boards, which were later displayed in the hospital foyer as part of the wider consultation to inform the design. One team member designed a logo to link the elements of the project together and this is now in use throughout the trust to denote dementia services.

The project centred on an artwork called the Memory Lane, which is made up of digital images on 210 ceramic tiles presented on four large panels at the end of the first-floor corridor. The team surveyed staff and the public before commissioning images that reflected the cultural and diverse backgrounds of those living in the area, including sporting heroes, industry, the blitz and the cathedral. The feature helps staff and visitors to engage with patients with dementia by providing interest and reference points, and acts as a trigger to remember past events, as well as invoking a sense of familiarity. It has proven to be very popular with everybody in the hospital as a reminder of the local history and heritage.

The team also commissioned a large, vibrant artwork called ‘Where Memories Dwell’, which adorns the wall leading to the lounge acting as a link to the Memory Lane. Based on a woodland theme, it incorporates memories submitted by the public and hospital staff.

A former seminar room has been transformed into the new Forget Me Not lounge – a private, relaxing non-clinical space where visitors and patients can spend time together. The room has been decorated in a contemporary style, with soft furnishings in natural colours of lavender and pastel greens. There is a choice of seating, with a sofa and comfortable chairs, while bespoke artworks, books and boxes of activities provide interest. A nurse call system has been installed, and the room has become a popular place for families to meet.

The learning from the project is now informing future trust developments to make the hospital more dementia friendly. For example, clocks are now being bought for all wards to aid orientation. The team combined the formal opening of the project, by the Lord Mayor of Coventry, with a successful dementia care conference for the local health and social care community.







***“The whole experience has opened my eyes to the importance of art, colour, light and the general environment in improving patient care.”***

Team leader

***“In 35 years of work – 23 of those spent in the NHS – this is one of the most rewarding pieces of work I have undertaken.”***

Patient involvement facilitator





Detail from screen, Cumbria Partnership



## 5 Overarching themes

Each of the projects described in Chapter 4 is unique to its setting, as every project has been grounded in the local needs of people with dementia, their carers and staff. However, a number of common themes emerged during the course of the programme:

- developing staff knowledge and skills
- identifying dementia friendly design features
- devising effective consultation and engagement
- securing community involvement
- improving the patient and carer experience
- embedding culture change
- effective fundraising
- facing challenges and harnessing opportunities.

Each of these is set out in this chapter.

### Developing staff knowledge and skills

Training and education were two key components of this phase of the EHE programme. Despite improvements in dementia training, there has been little – if any – focus on the effect of the physical environment on people with dementia, particularly when they are in unfamiliar surroundings. Gaining an appreciation of the effect of the environment for this patient group has been vital for clinical and estates colleagues. In the past, without this knowledge, many had found it difficult to appreciate how alien and confusing a hospital ward can be to a person with cognitive problems or dementia.

EHE participants often describe the EHE programme as developing ‘King’s Fund eyes’. Once they acquire this perspective, they are able to see their environments in a very different way, both at work and at home, and are able to truly understand the importance of first impressions on the way the patients perceive service quality and delivery and also on their actual experience of care.

Once the teams were equipped with the right knowledge, they were able to create far more supportive hospital environments for people with dementia at little, if any, additional cost than a normal refurbishment. For example, using brightly coloured paint can make an enormous difference, but it does not cost any more than a neutral shade such as magnolia. Meanwhile, architects, designers and estates colleagues have commented on how the schemes have been easier to plan as the clinical staff are much clearer about what they need to support patients more effectively, with a resulting economy in the development of the finished schemes.

#### Is your ward dementia friendly?

To help the teams assess the suitability of their environments for people with dementia, The King’s Fund worked with the teams to develop a tool called ‘Is your ward dementia friendly?’. This tool was used during the programme and is now available for others to use. You can find the full resource in the Resources section of this publication (see Tool 1: The EHE assessment tool, (p95) and is available online at: [www.kingsfund.org.uk/dementia](http://www.kingsfund.org.uk/dementia)

***“Despite my background as a dementia nurse, I have to admit that I had very little understanding at the start of the project of how the environment can affect people with dementia. This has been the greatest lesson, and now I am equipped with the evidence and ability to highlight the benefit to others.”***

Dementia specialist  
nurse

***“Many senior people working in the NHS don’t often see what our patients see.”***

Older people’s nurse  
specialist



### Identifying dementia friendly design features

Following their in-depth assessments of the physical environment and discussions with patients, relatives and staff, the initial challenge for most teams was to de-clutter in order to aid legibility (the ability to understand spaces) and improve safety.

Working closely with estates colleagues, improved and flexible lighting schemes were another common feature of the refurbishments, providing good, even lighting that can be adjusted depending on the time of day. Several EHE scheme sites are trialling and evaluating dynamic lighting schemes, and a number of sites are now using coloured LED lighting in a number of sensory rooms and social spaces.

Flooring has also been reassessed, to make sure that it does not look shiny and that there are no strips or changes in floor colour that could act as an unintentional barrier. Improvements to toilets and bathrooms have focused both on enlarging areas, so that patients can be helped to shower, and to ensure good colour contrast between toilet seats, rails and sanitaryware. Work has also been done to ensure that taps are of a traditional style rather than sensor taps and that baths are of as familiar design as is practical, so that these are recognisable to patients.

Before the projects, many ward areas were bland, with few distinguishing features, so that one bed bay would look very much like another. The use of accent colours and good pictorial and text signage helps with wayfinding to reduce confusion. Colours have been used to differentiate between different rooms and bed bays, as well as to help people find bathrooms and toilets. Some schemes have also used artworks or memory boxes to help people find their bed spaces. Placing easy-to-grip handrails along ward corridors, in contrasting colours, has encouraged patients to remain active.

Some of the larger ward schemes have replaced large nurses' stations with small, easily identifiable reception desks. This has freed up more space for patients to walk around, as well as providing space for small seating areas away from the bedside for patients and visitors. Staff can now write their notes in small pods or fold-down shelves in the bed bays. Early results from this approach are encouraging because the enhanced visibility of staff appears to be reassuring patients. There are fewer calls being made via the nurse call system, and the number of reported falls has decreased. Staff satisfaction measures have also increased.

Applying these principles requires teams to see environments from the patients' point of view. Simple changes do not have to cost a great deal but, using experience and common sense, can bring very significant benefits. Activities such as de-cluttering, improving signage and lighting (sometimes just by changing to daylight bulbs) can make a real difference, as can installing handrails, changing flooring, making small social spaces and giving patients something to do.

***"I have gained a greater appreciation of the impact of a quality and appropriate environment on different patient groups, staff and visitors. This experience has already improved my effectiveness in utilising the skills and knowledge gained from the programme for other schemes."***

Capital design building surveyor

***"It is possible to create spaces within a hospital that are strikingly stylish and yet comply with all the necessary health and safety and infection control regulations."***

Team leader

### The overarching design principles

The EHE team at The King's Fund has drawn on these straightforward changes to produce a set of design principles to help staff develop more supportive design for people with dementia. They are drawn from the EHE schemes in hospital settings, but are likely to have wide applicability in all care settings and in the home.

The design principles highlight five key elements of supportive design:

- legibility (the ability to understand spaces)
- orientation
- wayfinding
- familiarity
- meaningful activity.

They are presented in the Resources section as Tool 2: Overarching design principles (see p100).

## Devising effective consultation and engagement

As part of a team's project planning, the EHE programme places a major emphasis on early and ongoing consultation – not just with staff, but also with patients, carers and the wider community.

Involving carers as integral members of the team from the outset has allowed teams to utilise their knowledge and experience to the full. The carers themselves have been able to network with other carers to provide invaluable advice to their teams. Many have led consultation events during the design development stages.

Project teams have enabled patients with dementia to contribute to the individual schemes wherever possible, and many have developed innovative ways of encouraging and enabling their involvement – for example, by using coloured picture mats to inform colour choice and through lively, participative arts sessions. Patients have also been involved in choosing artworks and many have enjoyed selecting photographs of local landmarks.

## Securing community involvement

In many of the projects, the extent of community involvement has been extraordinary. Teams have used their projects as an opportunity to start a dialogue with their local community and raise awareness about dementia more generally. This has enabled staff to highlight ways for local groups to support patients and carers, both in the community and in hospital.

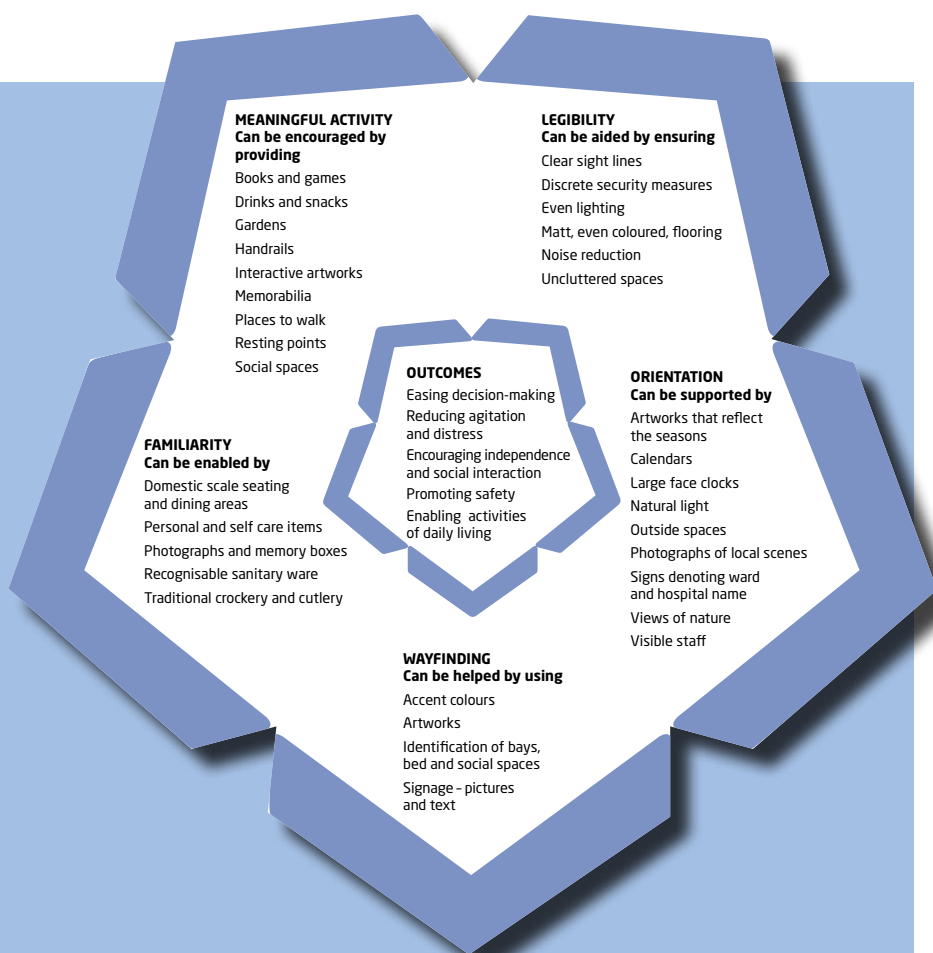
Project teams have run consultation events in town halls, at county shows and in community centres, with projects featured by local radio stations and newspapers. Some have run photographic and art competitions, providing wider links with local historical societies, photographic clubs and local trusts, many of which have provided memorabilia and artworks for their local schemes. Several projects have led to volunteer schemes to support patients and carers in the longer term, and in one trust a charity was set up to further the work of a memory clinic

***“The use of light, more spacious areas and being able to go outside, from my experience as a carer: these were the main things needed to help with lessening aggression and irritability.”***

Carer

***“The team feel that the most valuable part of this project was the consultation phase. We learnt that this is not merely a tokenistic process but one which creates innovative ideas and ensures that designs are created fully around the needs of patients and carers.”***

Team leader



## Improving the patient and carer experience

As part of their early planning, teams were encouraged to rigorously review care delivery and current working practices. This involved examining how care can be improved and enabled by changes in the environment – going beyond physical design to get to the heart of what matters to people. The carer representatives on each team provided unique perspectives, and team members were very willing to challenge current norms.



Interactive artwork, Franklyn Hospital

## Embedding culture change

Changes to the physical environment can enable significant practice and culture change. The programme has given team members the confidence to challenge practice and service delivery and to take some difficult decisions about reconfiguring working practices to improve patient care. This has not always been easy but the results have been extremely positive from the point of view of patients and carers, and staff are learning to work in different ways.



***“I was so nervous about bringing my husband into hospital, but I just can’t believe how beautiful it is here and how calm it feels. It has really reduced my anxiety about leaving him.”***

Carer

***“I like walking around the corridors and looking at all the different artwork.”***

Patient

***“My uncle has Alzheimer’s and has been in hospital frequently over many years. Over the last few months, there has been a very noticeable difference in the environment, and communication from all staff groups towards both of us.”***

Carer

Projects have found that calmer, well-lit and more legible environments, with good signage, are helping people to feel less agitated and more able to navigate unfamiliar places. Improving privacy and dignity has been key to all the schemes – for example, using opaque glass film to semi-obscure bed bays, so that people no longer feel that they are in a goldfish bowl. Improved nutrition has been aided by introducing new tea and coffee machines, fruit bowls and snack trolleys so that patients can help themselves when they want, rather than waiting for mealtimes.

People with dementia often want to walk about, and yet there are few dayrooms available – particularly in acute hospitals. So, teams have been adept at creating small seating spaces for people to sit away from the bedside, within ward areas and along corridors. They have also recognised that patients can get bored when in hospital – particularly if they have short attention spans. This has been tackled by increasing the range of activities available, from books and games to interactive artworks and creative art sessions.

Many of the projects in mental health and community units have incorporated improved physiotherapy and occupational therapy areas. Some have installed kitchens, designed for assessment purposes. As an added bonus, these are also enabling teams to run very popular cookery sessions.



For example, the impact of removing central nurses' stations has been extraordinary, not only in creating an easily identified, welcoming, reception desk, but in distributing staff to work in patient areas and to complete their paperwork at the bedside. This has had the added bonus of making them more visible to patients and as a result falls can be prevented and call bells are being pressed less frequently.

A time-lapse film taken before and after an EHE project shows just how much change there has been in the way staff work and interact. The provision of a central, comfortable seating space in the area where up to 20 staff used to gather has not only given patients and visitors somewhere to sit but has totally changed the ward atmosphere making it much calmer and less frenetic.

The national profile of the projects has also enabled good practice to be shared across and between organisations supporting the implementation of the dementia strategy. Schemes are informing further environmental improvements in the participating trusts from better use of colour and contrast to the purchase of large face clocks for all wards and the

introduction of coloured toilet seats and similar coloured doors for all toilets in patient areas. The teams are also acting as advisors and using their experience to influence councils and local care homes as they plan redevelopments.

## Effective fundraising

Almost without exception each of the teams undertook some fundraising activity. These ranged from local book sales, marathons, tea dances and balls to an extraordinary motorcycle ride that covered all four countries of the United Kingdom in a day. Leagues of Friends and hospital charities, local societies and individuals have all contributed to fundraising and support activities.

Many of the trusts have also contributed additional funds via their capital programmes, sometimes bringing forward refurbishment schemes to fit the programme timetable. The total costs of the 26 schemes, including VAT, are estimated to be £3.8 million against an initial capital investment of £1,000,000 (including the EHE Award) from the Department of Health.

***Not only has the new ward enhanced the environment for patients, the staff have clearly benefitted. There is a renewed enthusiasm for work which is resulting in improved quality of care and improved perceptions of care from the patients."***

Consultant physician

***"The new environment is already making me work differently; there are so many different places people can choose to go now."***

Staff nurse



'UK in a day' fundraising team, Leicester Partnership

## Facing challenges and harnessing opportunities

The teams have faced numerous challenges as they developed and managed their schemes. They have had to cope with local service reconfigurations and changes in organisational management as well as the current organisational changes in the NHS. They have needed tenacity, determination and a strong collective vision to deal with building contractors going into liquidation and disagreements with artists, designers and architects. However, the completed schemes attest to their determination to make a real and lasting difference to the care of people with dementia.

The scale of the challenge of caring for people with dementia is enormous. The EHE programme has demonstrated that using design principles founded on an understanding of the impact that the physical environment can have on people with dementia, and in partnership with carers, it is possible to create a more supportive care environment. In addition, the consultation process inherent in the EHE methodology has led to a greater awareness across the participating trusts of the needs of people with dementia, and has supported the implementation of the national strategy.

***“Senior members of the trust have been so impressed with the quality of the work and the outcome that we have executive team agreement to look to incorporate Enhancing the Healing Environment principles in all appropriate refurbishments across the trust, and that these will all have involvement and oversight by our patient engagement and experience group – quite an achievement across a trust of our size and complexity.”***

Director of engagement and foundation trust project director

***“The project was key to the trust deciding to choose dementia care in its cycle of three-monthly trust-wide awareness campaigns.”***

Clinical nurse specialist, older people



Sensory garden, Clarence Ward



Patient artwork made from sweet wrappers and newspaper, Riverside Ward



Inset glass artwork, Hull Memory Clinic



Aromatherapy, Marjory Warren Ward

***“The late afternoon used to be really difficult to manage because on the old ward, if one person became agitated or distressed there used to be a domino effect. Now, we’re just not seeing the same level of agitation. We can read the signs and intervene earlier and make sure the individual can go somewhere quieter if that’s what they need, or they can be accompanied on longer walks around the ward.”***

Sister

The critical role that the built environment can play in supporting people with dementia has been demonstrated through some exemplar schemes and tools are now freely available for others who wish to create more dementia friendly environments.

Tool 1: EHE assessment tool and Tool 2: Overarching design principles together with Tool 3: Bibliography for tools 1 and 2 are available in the Resources section of this publication (p101).





## **Talk to me of the good times**

*Tell me about the fun times  
when I have gone to ground –*

*Talk to me of the sunshine  
when I am confined in the dark –*

*Remind me of foolish laughter  
when I am sad and far away –*

*Take me through the good days  
when my eyes are dimmed –*

*Walk me back through the woodlands  
where I listen to birds –*

*Show me the rivers and fields  
where once I roamed and played –*

*Replay me the sound of the ocean  
now I am locked to the land –*

*Help me remember the friends I've known  
now that their faces fade –*

*Touch my hand and talk to me  
though I forget your name –*

*I am still a human being  
inside I am still the same.*

**John Manson**

Presented to the EHE Coventry and Warwickshire team by a  
member of the public at a consultation.

# 6 The evaluation

This section outlines the evaluation findings of this latest phase of Enhancing the Healing Environment – the Environments of Care of People with Dementia programme – which ran from 2009 to 2012. The evaluation was carried out by Abi Masterson Consulting Ltd and took place in two stages, each of which is described in turn.

As we saw in Chapter 1, despite the growing recognition of the need to improve the dementia care environment, evidence on the impact of the care environment on clinical outcomes for people with dementia is scant (see p15). For this reason, a key aim of this programme – and particularly the independent evaluation – was to build the evidence base in this area.

The EHE programme is a complex intervention (Medical Research Council 2008). This means that it has several interacting components within two key elements: first, a development programme for a multi-disciplinary team comprising clinical staff, estates and facilities staff, carers and service users; and second, a change to the fabric of the care environment, co-designed by the team.

Complex interventions are notoriously difficult to evaluate. However the trends in the data across this diverse range of settings and services – which had nothing in common other than being part of the programme – would tend to suggest that EHE had changed practice, transformed culture and improved lives. It also had a positive impact on falls, incidents of violence and aggression, and staff sickness and absence.

This chapter starts by setting out the methodology for each of the two stages of the evaluation before going on to summarise the findings.

## A note about data

The samples selected for both stages of the evaluation were chosen purposefully to maximise diversity of sites, settings and projects. Data were collected by the sites. To meet their local needs and to ensure that the data collection was not too burdensome, use was made of the administrative data that trusts already collected routinely. No attempt was made to control the case mix. Indeed, qualitative data suggested that since their transformation, the case mix of some EHE wards had changed to include an even higher proportion of people with dementia, perhaps because they had begun to develop a reputation as the wards with specialist expertise and better outcomes.

Also, many of the sites underwent significant organisational changes during the evaluation period – for example, with services being taken over by another organisation, restructuring of senior staff and physical relocation of services. These changes also had an impact on the data collection and opportunities for comparison – even within individual sites. For example, in one case moving to a new organisation resulted in a new data system being implemented.

Stage 1 of the evaluation

Stage 1 of the evaluation involved five of the 10 mental health trusts that began the EHE programme in 2009, selected to reflect the diversity of projects being undertaken.

Each site received evaluation support from The King's Fund team to ensure that local teams were confident in their data collection, that data was collected on the 'right' things (from the perspective of local stakeholders), and to ensure local ownership of the evaluation. All sites also carried out pre-and post-intervention audits, using relevant sections from the Design for People with Dementia audit tool (Dementia Services Development Centre 2008) along with a combination of any or all of the following determined by local need:

- mapping exercises observing or recording interactions in the spaces
- observations of use of space
- analysis of incident forms and falls data

- audit of medication prescription and administration particularly for agitation
- qualitative data about their experience of the area from patients, relatives and staff.

All sites improved their scores in the relevant elements of the University of Stirling's Design for People with Dementia audit tool (Dementia Services Development Centre 2008). Some dramatic effects were also noted, including reductions in falls, and in the use of antipsychotic medication, as well as fewer incidents of violence and aggression and improved recruitment and retention of staff (see Table 1).

TABLE 1: OUTCOMES FROM STAGE 1 OF THE EVALUATION

Site	Project focus	Outcomes
1	Dining room	6 months pre intervention: 5 falls, 2 disruptive incidents 6 months post intervention: 1 fall, 2 disruptive incidents
2	Enhancements to the assessment unit including main entrance	3–6 months pre intervention: 13 out of 15 patients on anti-psychotics 3–6 months post intervention: 11 out of 15 patients on anti-psychotics and changes in practice – alternatives to medication used to calm agitated patients
3	Enhancements to ward areas using colour and redesign of garden	4 months pre intervention: 87 falls, 43 aggressive instances 4 months post intervention: 71 falls, 20 aggressive instances
4	Redesign of Memory Clinic entrance, reception and social space	Charity of choice for local radio station Reduction in Did Not Attends Improved ability to recruit and retain reception staff
5	Enhancement of ward areas including enhanced spaces for carers and visitors	Changes in perceptions about the space – for example, referring to 'our lounge' and 'a destination'



The evaluation identified that the environmental transformation was preceded by changes in attitudes and behaviour, with staff demonstrating an increased awareness and knowledge of the needs of people with dementia. Morale improved and staff expanded their local networks and profiles.

There were also a number of clinical outcomes, including reductions in falls and violent and/or disruptive incidents and changes in practice in relation to the use of anti-psychotic medication. These changes informed the decision to undertake a further stage of evaluation in mental health and acute settings, focused particularly on clinical outcomes.

## Stage 2 of the evaluation

Stage 2 of the evaluation was co-designed in autumn 2011 with a group of EHE project team leaders from acute general hospital, mental health and community settings.

### Designing the methodology

Building on the findings from the first-stage evaluation, the team leaders came together for a facilitated workshop to help identify indicators that could be useful for measuring changes in practice resulting from the EHE projects. The aim was to highlight outcomes data that trusts were already routinely collecting for their own quality monitoring processes – for example, data used for measuring performance in CQUINs and providing evidence for commissioners, the Care Quality Commission and the NHS Litigation Authority.

The workshop participants selected the following indicators: patient experience, complaints, falls, untoward incidents such as violence or aggression, staff satisfaction, and staff sickness and absence. They chose these indicators because all are clearly outcomes rather than processes, they are meaningful and comparable between sites and across organisations, and they were likely to be impacted on by the EHE projects.

The use of anti-psychotic medication was not selected as an indicator. This is because very few patients were being prescribed this medication, due to professional concerns, significant media attention and the high-profile national Call to Action (Department of Health 2011c) about the appropriate use of anti-psychotics.

Some teams also supplied additional locally generated information from observations, satisfaction surveys and locally commissioned evaluations carried out by local universities or the teams themselves. These were used to add further context and richness to the data.

In stage 2 of the evaluation, data were collected six months before the intervention was completed and again six months afterwards. Where possible, data were collected from both the EHE ward and also from one or two other 'local comparators': wards that were similar in terms of case mix, geography, layout, attending clinicians, staffing patterns, and so on. This was intended to help tease out the effect of any other cultural change that was taking place within the organisation over the same period. However, the evaluators did not attempt to control the case mix.

The evaluation team also gathered rich qualitative data through conversation with team members during the evaluation. These took place at large facilitated workshops with all team members in January 2012, and through frequent individual conversations with team leaders while supporting them in their data collection.

### Interpreting the data

Although the evaluation focused on areas for which trusts were routinely collecting data, there were still differences in the types and format of data received. Some of these differences resulted from the slightly different features of the two main data systems in use nationally – Datix and Ulysses. Additional variation was a consequence of the level of granularity of data available in different trusts. For example, some trusts produced ward-level patient experience data as a matter of course, while others did not.

The evaluation also highlighted possible differences in the way individual frontline staff within and across sites classify the detail of the data – for example, when judging the severity of incidents and whether a fall is ‘major’ or ‘minor’. Making sense of the staff sickness and absence data was often complicated by including individuals who were on long-term sick leave. Finally, official complaints in all services tended to be very low – fewer than one a month – and this factor reduced the sensitivity of complaints as an indicator.

**The projects selected**

The evaluation team identified 10 sites for stage 2 of the evaluation: five acute general hospitals and five mental health or community hospitals. Once again, these were selected to reflect the full range of settings and services and different types of projects. The range included:

- an emergency assessment unit and therapeutic garden in an acute trust
- several acute elderly medical or complex care wards
- social spaces including dining rooms, day rooms and gardens in both acute and mental health settings.

The works involved included:

- fundamental redesign of acute wards
- redesigning entrance and social spaces and improvements to corridors
- creating a balcony garden and redesigning dayrooms and dining rooms
- developing a multi-sensory room.

The range of schemes is shown in Table 2.

The evaluation team then cleansed the data by detecting errors (such as ensuring that all projects gave the actual project completion date as opposed to the official launch date) and removed inconsistencies in order to maximise the quality and utility of the data.

Having seen how the two stages of the evaluation were run, we go on to look at the key evaluation findings.

**TABLE 2: TRUST AND PROJECT FOCUS**

Trust	Social spaces (dayroom, dining area)	Entrance	Corridors	Bed spaces/bays	Garden
A	✓				✓
B	✓	✓	✓	✓	
C		✓	✓	✓	
D		✓		✓	
E	✓			✓	✓
F		✓	✓	✓	
G	✓				
H	✓	✓	✓		
I		✓	✓	✓	
J	✓	✓			

Each site was asked to provide data for six months before the transformation was completed and six months after, against all of the indicators (patient experience, complaints, falls, untoward incidents such as violence and aggression, staff

satisfaction and staff sickness and absence). The evaluation team received complete data for falls, incidents of violence and aggression and complaints and partial data for patient experience and staff satisfaction.

Findings

This section highlights findings within each of the following areas:

- the physical care environment
- falls
- incidence of violence and aggression
- additional patient-related data
- staff satisfaction
- staff sickness and absence.

The physical care environment

The findings of the first stage of the evaluation revealed many common problems relating to the physical care environment in mental health settings, in all parts of the country, even though many of the buildings were comparatively new and many had been purpose built. These findings were also replicated in the acute settings we worked with in stage 2.

Common problems with the physical environment in mental health and acute settings

- Poor signage and lack of way-finding cues
- Poor use of colour and contrast
- Unhelpful lighting, causing glare and pools of light and shadow
- Shiny floors
- Clutter and distractions
- Stark, unwelcoming spaces off long, featureless corridors
- No personalisation of space
- Under-use of gardens and outside spaces.

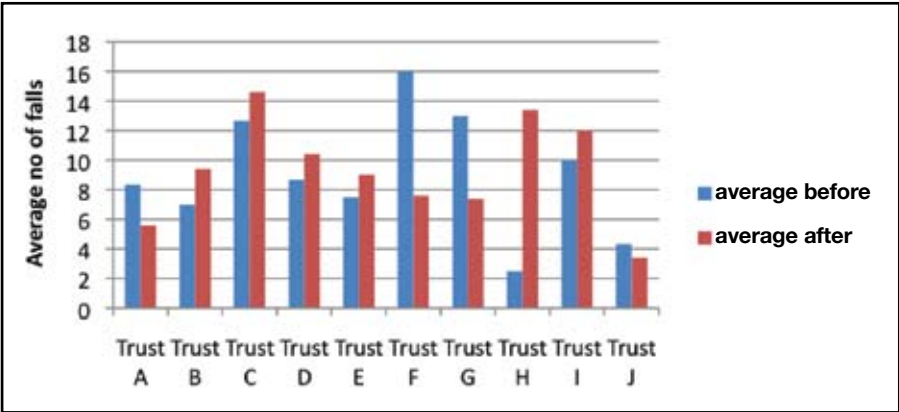
Falls

Figure 4 below presents the average number of falls in the six months before and after the environmental transformation for the 10 trusts.

In four trusts (A, F, G and J), the number of falls decreased following the environmental change, but in six trusts (B, C, D, E, H and I) the number increased. These falls outcomes, in terms of the likelihood of more or fewer falls post intervention, did not seem to be affected by whether the trust was a mental health or an acute trust. To try to better understand the reasons for this, the evaluation team carried out a detailed analysis of the data from the trust with the biggest increase in falls (Trust H).

This further analysis highlighted that the proportion of falls in the refurbished areas had actually fallen. Before the EHE-inspired changes to the entrance, corridors and social spaces, 36 per cent of the falls occurred in the lounge or corridors. After the transformation of these areas, only 26 per cent of the falls occurred in these locations.

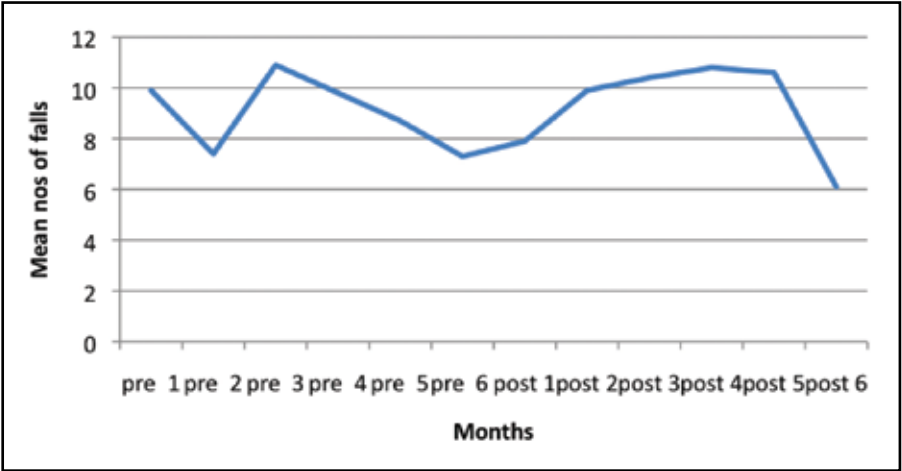
FIGURE 4: FALLS DATA, ALL TRUSTS





The mean numbers of falls across all 10 trusts was used to produce Figure 5 below.

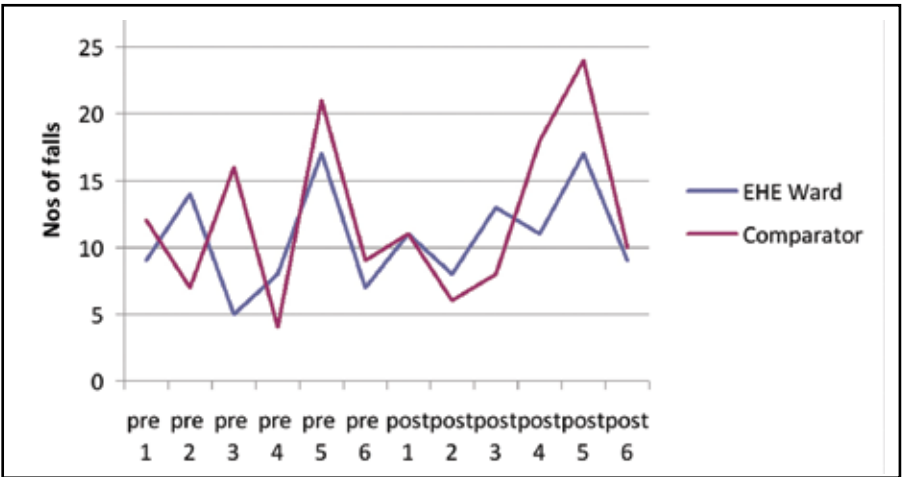
FIGURE 5: MEAN NUMBERS OF FALLS ACROSS ALL TRUSTS



This suggests that for almost all of the evaluation sites, falls tended to decrease in the months leading up to the intervention, rise afterwards, and then begin to decline again. However, some team leaders expressed their disappointment that the refurbishment did not seem to have had the anticipated reduction on falls, and proposed explanations:

*“We have noticed an overall increase in falls numbers over the winter months, which would explain the increase on both wards [the EHE ward and the comparator ward in the same trust]. This is consistent with national trends.”*  
EHE project participant

FIGURE 6: NUMBER OF FALLS IN TRUST H, EHE SITE AND COMPARATOR



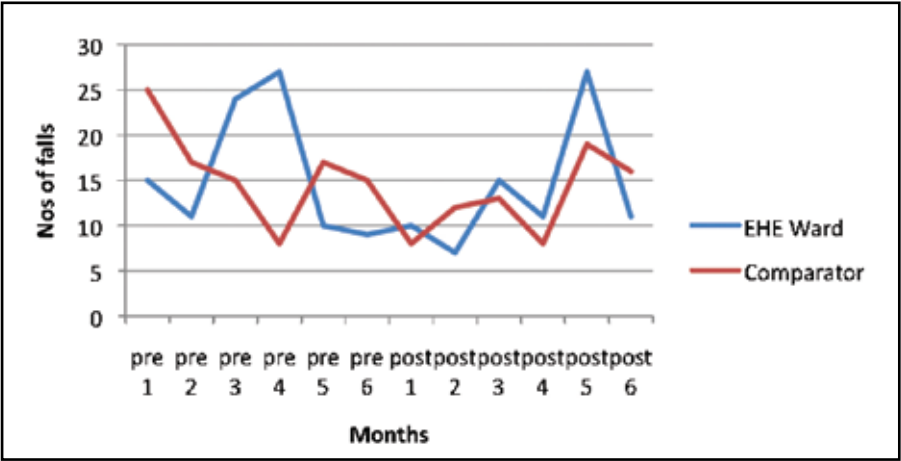
In other sites the increase was greater in the EHE ward than in the local comparator ward in the same trust. The team leader in Trust F explained this apparently counterintuitive finding as follows:

*“The falls on [ward name] were not decreasing as expected mostly due to the fact changing the culture encouraging people with dementia to walk about and treat the ward as a shared space rather than an area belonging to the professionals. ‘Enabling’ rather than ‘disabling’ means increasing the risk that patients will fall. But we are very happy to see that this ward has not had any pressure ulcers, and this links to that freedom of movement and maintaining independence.”*  
EHE project participant

Changes to case mix were also believed to have an impact, as this quote from the team leader in Trust C illustrates:

*“[name] Ward is now seen as the ‘dementia ward’, and has seen an increase in the number of patients admitted to the ward who have dementia and are challenging to manage due to their complexities.”*  
EHE project participant

**FIGURE 7: NUMBER OF FALLS: TRUST C EHE WARD VERSUS LOCAL COMPARATOR**

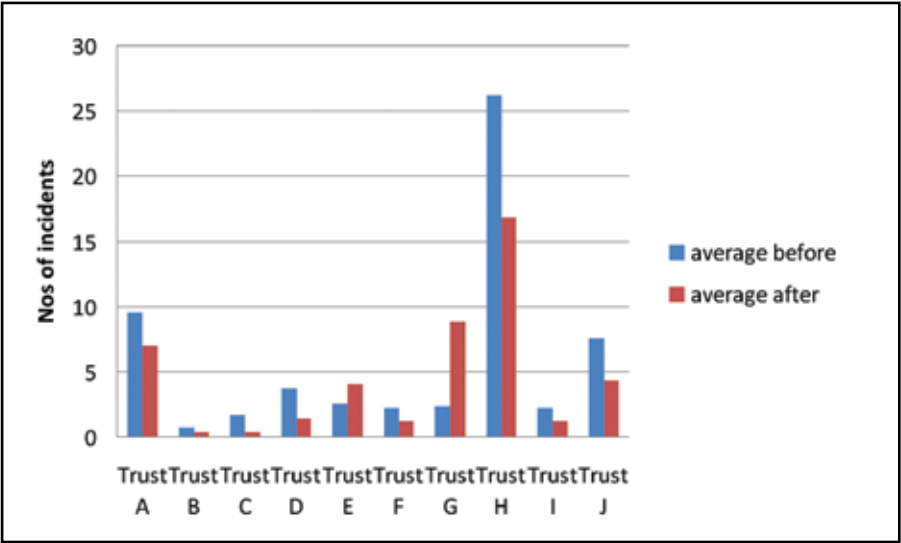


We now go on to consider how the EHE projects have impacted on clinical outcomes in the second area: violence and aggression.

**Incidence of violence and aggression**

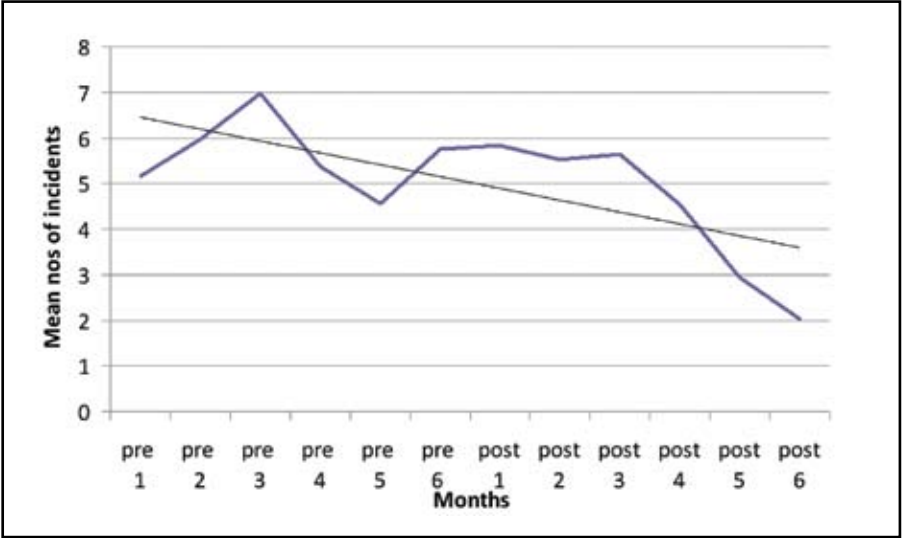
The figure below presents the mean number of incidents of violence and aggression in the six months before and after the environmental transformation.

**FIGURE 8: INCIDENCE OF VIOLENCE AND AGGRESSION, ALL TRUSTS**



This shows that in eight trusts (A, B, C, D, F, H, I and J), incidents of violence and aggression went down post intervention. In two (trusts E and G), the trend was rising. The mean number of incidents of violence and aggression across all trusts each month is presented in Figure 9.

FIGURE 9: INCIDENCE OF VIOLENCE AND AGGRESSION, MEAN



Incidents of violence and aggression are much more common in mental health trusts (where patients may well have been admitted because of their challenging behaviour) than in acute trusts.

Once again, the comparisons within trusts offer a useful and different perspective. In the trusts that supplied data from a local comparator, the rate of decrease in violent and aggressive incidents was greater in the EHE ward than in the comparator. Figures 10 and 11 show the number of incidents of violence and aggression in an EHE ward versus a local comparator ward in Trust A, which is a mental health trust, and then in Trust C, which is an acute trust.

FIGURE 10: INCIDENCE OF VIOLENCE AND AGGRESSION, TRUST A

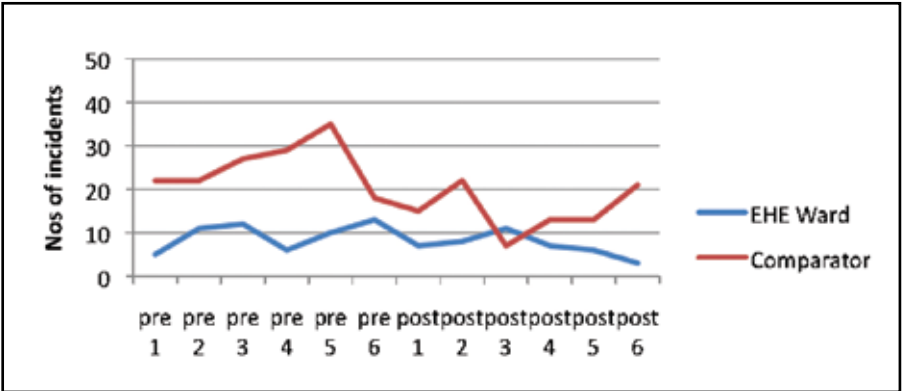
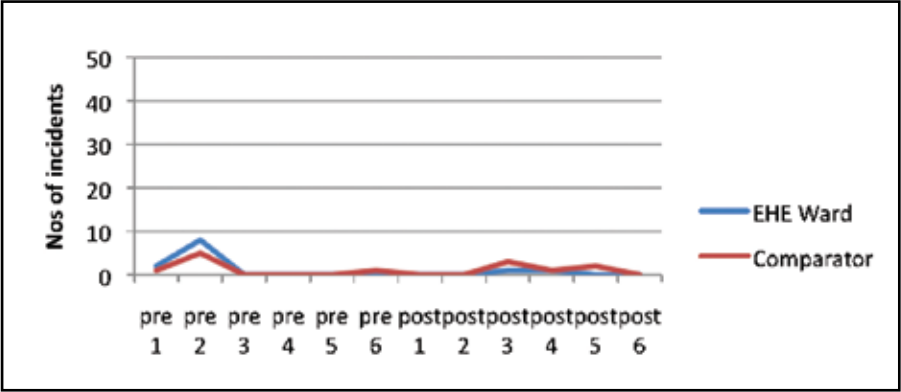




FIGURE 11: INCIDENCE OF VIOLENCE AND AGGRESSION, TRUST C



From this most recent phase of EHE, we can confidently assert that the following environmental changes are likely to significantly reduce agitation and distress, with positive consequences for both patient and staff wellbeing:

- making spaces seem smaller and more familiar
- introducing more cues to support orientation and wayfinding
- reducing the numbers of decisions that have to be made by patients in finding their way to places such as the toilet, the dining room or their own bed space.

Additional patient-related data

Several of the sites also shared other data that they had collected locally to evaluate the impact of their projects, such as notes from observations. These also illustrated the positive impact of their projects. For example in one of the acute trusts (Trust B), an EHE ward that had historically performed badly in the trust’s ‘How are we doing?’ survey had become one of the highest scoring wards in the division since completing the project. More patient-centred approaches were also emerging in many of the sites. One example, from Trust D, is shown in the box below.

Therapeutic use of outside spaces:

Occupational therapists and physiotherapists were interacting with patients and encouraging them to assist in planting bulbs in the garden. Patients were able to choose where the bulbs were to be planted and they were encouraged to dig holes and use garden tools themselves to plant the bulbs. The patients who were unable to assist in planting bulbs were encouraged to touch and smell flowers and lavender, enabling them to become involved in the garden activity.

Patients’ relatives engaging with staff and patients in the garden:

Relatives were encouraged to sit in the garden with the patients, during the activity and engage with staff. Relatives were able to participate in the provision of drinks and snacks and talk to the different staff members who were caring for their relatives in an informal setting. This also allowed relatives to observe patients in a group activity and encouraged social interaction between patients, relatives and staff.

Staff assessing patients in/during garden activity:

The doctors were completing their ward round during the garden activity and rather than take relevant patients back into the ward area the doctors observed patients in the garden setting and participated in the activity themselves. This allowed the patient to stay in the garden and interact with other staff and patients and join in the group activities.

**Staff satisfaction**

Only one of the Trusts, Trust D, had access to staff satisfaction data at ward level. Their staff satisfaction questionnaire results indicated that 87% of the staff felt that the environmental changes had impacted positively on their job satisfaction. Their qualitative comments in this same survey were:

- looks cleaner and brighter - makes you feel brighter
- feels like we have more time to talk to patients and families
- in terms of placing the nurses' stations in the bays - visibility gives patients increased security.

And comments from the team leaders in the other sites suggested that EHE was having a positive impact on staff satisfaction, as the following quote (from Trust G) illustrates:

*“NHS Knowledge and Skills Framework appraisals carried out during 2011 indicate that unit staff feedback about the project was very positive. There have been continuing, ongoing positive comments about the environment from patients, visitors, staff and the various auditors who have come to look around since our service was taken over by [name of trust].”*

EHE project participant

When focus group participants were asked what taking part in EHE had enabled them to do now that they wouldn't have been able to do before, two EHE project participants gave the following responses:

*... talk with confidence about how improving the environment does actually create better outcomes for patients and staff – because I've seen it happen. I'm also able to walk into the ward with a smile on my face.*

*... approach the chief executive or director of nursing, talk about the environment and the needs of people with dementia, and stand up in front of people and tell them my thoughts.*

When project participants asked how EHE had changed their practice, responses included:

*EHE has turned my practice around! I am much more confident and articulate. Work is a pleasure every day, and I have become absolutely passionate about the needs of people with dementia. I hope all this improves the care I provide.*

*It has changed the culture on the ward – we are more enabling and not doing things for people.*

**Staff sickness and absence**

Staff sickness and absence – especially short-term sickness – are indicators of staff wellbeing and job satisfaction. Both are costly to the service. The participating trusts used a variety of systems to record sickness and absence rates. Some produced percentage sickness rates, which did not distinguish between short- and long-term sickness. Others produced absolute numbers of shifts lost, with absences caused by short-term sickness identified separately.

Sickness rates were increasing in many of the trusts during the evaluation period but sickness and absence rates on EHE wards were lower than their comparators in the same trusts. This can be seen in Figure 12, which presents the data from trusts A (produced from percentage sickness-rate data) and F (produced from shifts lost through short-term sickness).

FIGURE 12: RATES OF SICKNESS AND ABSENCE, TRUST A

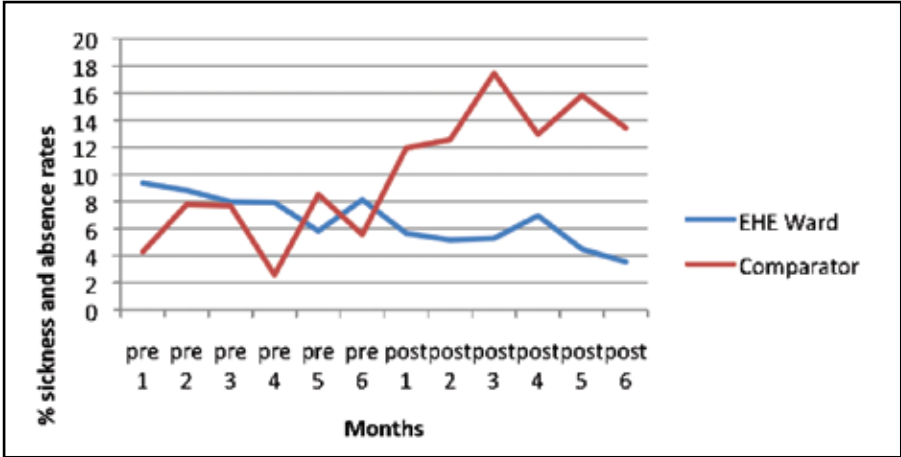
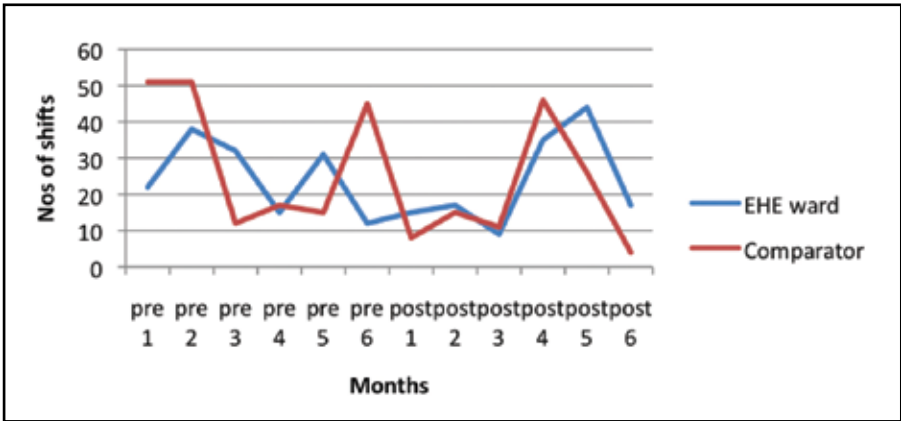


FIGURE 13: NUMBER OF SHIFTS LOST THROUGH SHORT-TERM SICKNESS, TRUST F



When patients are particularly distressed, extra agency and bank staff are sometimes booked to ‘special’ them: that is, to give them one-to-one attention and observation. So, the evaluation team also collected data on spending on bank and agency staff. The data appeared to indicate that less was spent on bank and agency staff in the EHE wards.

The remainder of the chapter presents further evaluation findings in three areas that sit outside of the key themes highlighted above:

- staff views
- unexpected outcomes
- project impact on wider change.

**Staff views**

Staff gave the following views of how and why EHE works:

- changes to the physical environment improves both carer and patient experience and improves the relationship between staff and carers/families
- EHE transforms practice and culture by getting staff to think and work differently, regain a pride in their work and ‘own’ their clinical area
- for staff and carers participating in EHE, it improves knowledge and confidence to question, challenge and change practice
- the programme introduces participants to the evidence, inspires them, helps them see what is possible, and then offers ideas and support to enable them to lead and deliver real change.



Conversations with team members throughout the evaluation process and at the facilitated focus group gave context to the administrative data and highlighted environmental interventions and processes for change that they had found to be particularly helpful locally, some of

which do not appear elsewhere in the literature. The box below summarises the interventions that the teams reported as having the most significant impact on staff and the patient experience, and which they felt truly made a difference. It draws on discussions and the formal evaluation.

**Environmental interventions that make a difference**

- Make sure entrances to units, wards and departments feel welcoming
- Replace nurses’ stations with proper reception desks and pods or areas in bays where staff can write up notes
- Transform corridors into pleasant walkways by providing handrails, using appropriate artwork, thoughtful use of colour and lighting, and regular resting points
- Minimise the number of ‘decision points’ – for example, enabling patients to see the toilet from the bed and the day room
- Ensure clear sight lines and structures to enable staff to observe patients discreetly
- Maximise views of nature and, where possible, provide access to gardens
- Sub-divide large spaces such as day rooms and dining rooms to make them domestic sized so that they feel more homely and safe
- Encourage social dining and promote independence
- Make sure patients have independent access to drinks and finger-food snacks all day long

- Choose table shapes and sizes carefully, to ensure that tables are reasonably heavy and stable, the tabletop big enough for staff to assist with eating and drinking, and that there is enough space between tables
- Make sure there are nice things to touch and hold and books, pictures, local photos, memorabilia to encourage conversation
- Install sanitary ware of a recognisable style, with contrasting colours for toilet seats and grab-rails
- Reduce distractions by de-cluttering and reducing the numbers of notices
- Reduce noise levels
- Using natural light and cues such as clocks to encourage daytime wakefulness
- Ensuring that lighting mimics natural day–night circadian rhythms by using dynamic lighting systems
- Using bold accent colours and signage that includes pictures as well as text
- Use numbers, colours and memory boards or boxes to aid orientation.

**Unexpected outcomes**

Despite the apparent pressure on space, even in the busiest acute hospital environments there are underused spaces, such as bathrooms, storage areas, dayrooms and sitting rooms that can be used in different ways to maximise the benefit for patients, relatives and staff.

All staff reported unexpected outcomes from their projects. These included:

- the increase in social dining and patient engagement in meaningful activity
- reduced need to call security
- less frequent use of nurse call systems
- a more outward-facing perspective – for example, through establishing relationships with arts and community groups
- reduced isolation for the service, with more outside groups coming in to use the refurbished spaces
- renewed staff interest in learning more about dementia and the environment.

**Project impact on wider change**

Previous EHE evaluations have noted that the change process itself had many positive consequences for those involved. Members of the clinical team such as hospital receptionists, whose contribution is sometimes overlooked, often came to the fore with valuable contributions to the projects and fresh perspectives on the services.

Teams encouraged community and staff engagement in the services through activities such as photography competitions to generate artworks, and by establishing collaborations with local art galleries and community groups.

Some of the organisations and team members have won awards for their project work and have gained positive national profiles and reputations. Many of the sites have become regional and national beacons of excellence for sensitive and appropriate design for people with dementia.

**Independent feedback**

One of the trusts had an unannounced inspection from its local joint commissioning team (JCT). The report stated that:

*The JCT were very impressed by the fact that in this high-end challenging behaviour unit for people with dementia, only one service user was being prescribed anti-psychotics. This clearly demonstrated that the staff of this unit were able to manage the challenging aspects of this client group without resorting to medication. This should be the benchmark for all units and care homes in [county].*

A further independent evaluation of another project stated that:

*The questionnaire provided evidence to suggest that mean scores from elements of the hospital experience (from the patient and carer perspective) had improved post changes. These elements included*

- *perceptions of the physical environment*
- *way-finding and orientation to the ward environment*
- *perceptions of care.*

### Discussion

The positive difference that EHE makes to clinical and staff outcomes appears to depend on the complete EHE package, including:

- the stipulations regarding team membership
- the requirement to include carers as core team members
- the educational support
- the consequent environmental transformation.

Changes in staff attitudes and behaviour preceded the environmental transformation because staff increased their awareness and knowledge about the needs of people with dementia by attending the EHE programme. This increased knowledge and awareness, together with implementing the principles of supportive design for dementia, had a demonstrably positive impact on clinical outcomes and patient and staff wellbeing.

### Learning points

This latest phase of the EHE programme has highlighted the need for better training and education of clinical, estates and support staff. They need to know about the importance of developing more supportive design solutions for people with dementia. They also need to understand the critical role that carers can play in this education. The experience and deep understanding that carers have brought to the teams has ensured that improvements have been focused on the areas that really matter to people with dementia.

Many of the changes in staff behaviour appear to have occurred as a consequence of the development programme. In other words, they began before the environmental transformation. Examples of changes in staff attitudes included investing in tablecloths and new crockery, laying tables for meals, and implementing new activities for patients such as a therapy hour. In the words of one of the team members, 'It's not just about the paint.'

The teams' experience of using the University of Stirling's Design for People with Dementia audit tool (Dementia Services Development Centre 2008) in hospital environments highlighted the need for quick, and easy-to-use environmental audit tools that can be used by carers, patients and/or lay people. As a consequence, the EHE team has worked with a range of sites and settings to develop and test two new tools:

- a straightforward and accessible environmental assessment tool called 'Is your ward dementia friendly?' (see Tool 1: EHE assessment tool, (p95)
- overarching design principles to enable health care organisations to work directly with carers to identify systematically where environmental improvements are needed to enhance the quality of the care for people with dementia (see Tool 2: Overarching design principles, (p100).

These two tools are supported by Tool 3: a bibliography of the resources used to inform the development of tools 1 and 2.



Tile making, Devon Partnership





Photographs, Franklyn Hospital

Summing up

The purpose of the evaluation was to demonstrate the impact of the programme by collecting comparable data between and within sites and highlighting areas amenable to further research. It was also important that the evaluation was not burdensome for those trusts involved but reflected the full range of settings and services.

There is still a need for high-quality empirical studies to determine the clinical and cost-effectiveness of non-pharmacological interventions such as EHE in the hospital environment. However, the two-stage evaluation reported here indicates that

simple and inexpensive changes to the physical environment appear to deliver positive outcomes in relation to:

- incidence of violence and aggression
- falls
- patient and staff behaviour and use of space
- patient engagement in meaningful activity
- staff sickness and absence rates.

# 7 Conclusion and recommendations

The scale of the challenge of caring for people with dementia is enormous. But the Enhancing the Healing Environment programme has demonstrated that it is possible to create a more supportive care environment by applying specific dementia friendly design principles. These supportive design principles must be founded on an understanding of the impact of physical environment on people with dementia and strong partnership working with them, their carers and care staff.

The consultation and design development process for the projects described in this publication has already led to a greater awareness of the needs of people with dementia in the participating organisations. It has supported the implementation of the national strategy. It has also highlighted the critical role that the care environment can play in supporting people with dementia and cognitive problems.

The schemes have left a legacy of inspiration, and this phase of the EHE programme has produced the following key learning points:

- Dementia friendly design improves clinical outcomes, is cost effective and improves staff recruitment, retention and satisfaction
- Introducing staff to the principles of supportive design for people with dementia has a positive impact on falls, disruptive incidents and the use of non-pharmacological approaches to managing challenging behaviour
- There is value in multi-disciplinary approaches to service improvement, with the carer and/or patient at the centre
- Transforming physical environments in acute and mental health settings enables practice and service change, as well as improving the patient, carer and staff experience
- Not all effective improvements are costly or require major capital works
- EHE builds capacity and capability in the staff involved as well as transforming care practices
- Involvement in EHE provides significant personal and leadership development opportunities for those taking part.

## How can services become more dementia friendly?

The tips in the box below highlight low-cost ‘quick wins’ for organisations wanting to make improvements that can have an immediate impact on their environment for people with dementia.

### Tips for immediate impact

- De-clutter.
- Offer multiple cues for orientation to time and place, including clocks, calendars and clear wayfinding to bed spaces and toilets.
- Transform corridors into pleasant spaces for walking about safely.
- Ensure toilet seats and grab-rails are in contrasting colours.
- Encourage social dining and engagement in meaningful activity.
- If more resources are available, install matt flooring and good-quality lighting.

### How dementia friendly is your ward?

- If you want to know how dementia friendly your care environment is, the environmental assessment tool (Tool 1: EHE assessment tool, p95) is an evidence-informed tool that will help.

## Recommendations

The evaluation findings highlight the importance of supportive design for dementia and recommend the following actions:

- All health and social care providers need to audit their physical environments for dementia friendliness
- All dementia awareness training needs to include the impact of the physical environment on people with dementia
- All health and social care providers need to use The King's Fund design principles and assessment tools when commissioning and working on routine refurbishment of clinical areas, as well as in new builds
- The Department of Health needs to consider developing dementia friendly design guidance for all health and social care providers
- The NHS Commissioning Board needs to give consideration to the physical environment as part of the Commissioning for Quality and Innovation (CQUIN) payment framework
- The Department of Health needs to consider commissioning an evaluation of the economic impact of changing the physical health care environment for people with dementia specifically, for patients generally, and for staff
- Building on the welcome announcement in October 2012 of £50 million for environmental improvements to NHS, social care and dementia care environments, the Department of Health needs to consider further encouraging health care providers to prioritise improvements to improve the environment of care for people with dementia in hospital
- The National Institute for Health Research should consider funding a randomised controlled trial that uses a range of pre-intervention and post-intervention measures to test the impact of the EHE model on patient experience and clinical outcomes for people with dementia.



Light box, Franklyn Hospital

# Part 3 Resources

Tool 1: The EHE assessment tool

Tool 2: Overarching design principles

Tool 3: Bibliography for tools 1 and 2

Project directory

References



## Tool 1: The EHE assessment tool

In order to help the project teams demonstrate the impact of their projects, the EHE team developed an environmental assessment tool called ‘Is your ward dementia friendly?’ Experience indicated that it was important to assess not only the physical environment (such as floor coverings and use of paint colours) but also the way that people behave and interact in the environment. This second element was absent in the other environmental audit tools available at the time.

The assessment tool is evidence informed (Fleming et al 2007; Marshall 2010) and focuses particularly on aspects of the physical environment, such as the colour of toilet seats and doors, lighting, flooring, signage and wayfinding that are known to impact on people with dementia. Its development was informed by expert opinion, drawing on the University of Stirling’s Design for People with Dementia audit tool (Dementia Services Development Centre 2008) and the National Audit of Dementia Care in General Hospitals (Royal College of Psychiatrists 2011).

It was subjected to rigorous testing in general and mental health sites, by teams that included carers. It offers a robust means of making judgements about the quality of the care environment, and is available to health care providers free to download from the web.

The assessment tool was deliberately kept short and focused and written in plain English. This was to ensure that it could be used by carers and other lay people as well as health care professionals. The evidence suggests that having a smaller number of criteria makes data collection more manageable. Short and simple tools like these are more likely to be used and therefore better support the delivery of improvements in practice.

The tool is divided into the following seven criteria:

- the environment promotes meaningful interaction between patients, their families and staff
- the environment promotes wellbeing
- the environment encourages eating and drinking
- the environment promotes mobility
- the environment promotes continence and independence
- the environment promotes orientation
- the environment promotes calm and security.

The criteria are intended to be simple statements that describe the standard expected and can be used to make assessments of quality. Each criterion contains a statement and some prompt questions, to help the assessor in developing his or her responses. The criteria have not been weighted because some criteria may become more or less important. Their importance may also vary over time, depending on the particular focus of the care setting and the nature of the patient population in that setting. The assessment can then be repeated at regular intervals to see the degree of improvement that has been made.

**Is your ward  
dementia friendly?**  
The EHE Environmental  
Assessment Tool

## How to use the assessment tool

## How to use the assessment tool

The assessment tool contains seven overarching criteria and a set of questions to prompt discussions. It should be completed in full. Walk around the ward/clinical area you are assessing. Consider each of the questions in turn and give them a score out of five, where five indicates that this aspect of the criteria is met completely.

The assessment tool can be used by a single individual or a mix of patient/carer and staff. It provides opportunities for discussion and reflection on current practice and for identifying areas for improvement.

The assessment tool can be used by a single individual but using it in pairs, ideally a mix of patient/carer and clinical/estates staff, offers valuable opportunities for different perspectives on the care environment and how to improve it. The experience of the tool by carers has been that joined to constructive conversations about the philosophy and purpose of care.

A summary sheet has been provided for you to fill in at the end of the assessment tool should help to that guide you to the areas you may wish to highlight for initial improvement.

### How the tool was developed

## How the tool was developed

This assessment tool was developed in collaboration with NHS trusts participating in The King's Fund's Enhancing the Healing Programme (EHP) programme. This phase of the EHP programme was funded by the Department of Health to support the implementation of the National Dementia Strategy. The assessment tool is informed by research evidence and reflects best practice. It is the first of a series of tools produced by The King's Fund to help individuals and organisations develop more supportive

Date ..... Department .....

Date \_\_\_\_\_  
Ward/Unit/Department \_\_\_\_\_

Assessment carried out by

## Questions

**Questions**  
Please score each answer from 1 - 5  
(1=not met, 2=partially met, 3=moderately met, 4=mostly met, 5=totally met)

- Please score each answer (1 = barely met, 5 = totally met)
- |          |   |                          |
|----------|---|--------------------------|
| <b>A</b> | Does the approach to the ward/unit/department look and feel welcoming?                                  | <input type="checkbox"/> |
| <b>B</b> | Is there an obvious reception desk?   | <input type="checkbox"/> |
| <b>C</b> | Does the ward/department give a good first impression i.e, does it look clean, tidy and cared for?      | <input type="checkbox"/> |
| <b>D</b> | Are there obvious social areas, such as day rooms?  | <input type="checkbox"/> |
| <b>E</b> | Are the chairs in these social areas arranged in small clusters that encourage conversation?            | <input type="checkbox"/> |
| <b>F</b> | Are other activities encouraged in social areas rather than just passively watching TV?                 | <input type="checkbox"/> |
| <b>G</b> | Can staff observe unobtrusively, while being seen themselves, in all areas of the ward/department/unit? | <input type="checkbox"/> |

Please give examples of good practice/areas of concern

design for people with dementia. For further details about the EHE programme go to [www.kingsfund.org.uk/ehe](http://www.kingsfund.org.uk/ehe)

**How you might use the results**

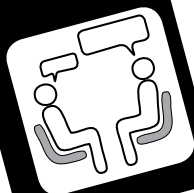
## How you might use the results

You could benchmark your scores against other wards and departments in your trust and even more widely, to see how you compare and to highlight particular areas for improvement.

If you have low scores in a particular area, think what action you can take to make improvements within your area of control or whether it needs to be addressed with others. If your scores are low overall you might want to use this to help inform discussions on the need for environmental improvements with trust senior management.

We would be happy to receive feedback on the assessment tool. If you would like to contact us please email us at [eh@kingsfund.org.uk](mailto:eh@kingsfund.org.uk)

**1**  
The environment promotes meaningful interaction between patients, their families and staff



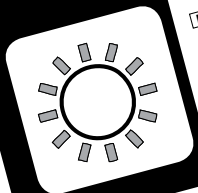
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## 2

### The environment promotes well-being



#### Questions

Please score each answer from 1 - 5  
(1=barely met, 5=totally met)

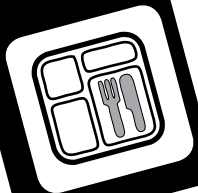
- ☐ **A** Is the level of light comfortable and appropriate for what patients want to do in the space?
- ☐ **B** Is it possible to adjust the light levels according to the time of day and care needs?
- ☐ **C** Is the lighting even eg without pools of light and/or dark areas, stripes or shadows?
- ☐ **D** Is the lighting designed to support normal sleep and wake patterns?
- ☐ **E** Is there good natural light in bed areas and social spaces?
- ☐ **F** Are personal objects, including self-care items, situated where the patient can find them?
- ☐ **G** Are views of nature maximised?
- ☐ **H** Are links to nature maximised, eg, by the use of natural materials, colours, artefacts and artworks?
- ☐ **I** Do patients have independent access to outside space eg garden, courtyard, terrace, that it is safe for them to use?

Please give examples of good practice/areas of concern

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## 3

### The environment encourages eating and drinking



#### Questions

Please score each answer from 1 - 5  
(1=barely met, 5=totally met)

- ☐ **A** Do patients and/or their relatives have constant independent access to hot and cold drinks?
- ☐ **B** Do patients have independent access to snacks and finger food?
- ☐ **C** Is the crockery and glassware of familiar design and in a distinctive colour that contrasts with tables and trays?
- ☐ **D** Is there a space where patients can eat together away from the bedside?

Please give examples of good practice/areas of concern

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4

The environment promotes mobility

Questions

Please score each answer from 1 - 5  
(1=barely met, 5=totally met)

A

Is the flooring matt rather than shiny?

☐

B

Could the lighting or natural light from windows make the floor appear to be wet or slippery?

☐

C

Is the flooring in a colour that contrasts with the walls and furniture?

☐

D

Is the flooring a consistent colour, ie does not have speckles or pebble effects?

☐

E

Are there handrails in the corridors?

☐

F

Are the handrails in a colour that contrasts with the walls?

☐

G

Is it possible to grasp the handrails properly?

☐

H

Is there space for patients to walk around independently?

☐

I

Are there small seating areas for people to rest along corridors and/or by the reception desk?

☐

J

Are there points of interest eg photographs or tactile artworks, along the corridors?

☐

Please give examples of good practice/areas of concern

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5

The environment promotes continence and independence

Questions

Please score each answer from 1 - 5  
(1=barely met, 5=totally met)

A

Can the signs to the toilets be seen from all patient areas?

☐

B

Do all toilets and bathrooms have the same clear signage?

☐

C

Are all toilet doors painted in a single distinctive colour?

☐

D

Are the toilet seats, flush handles and rails in a colour that contrasts with the toilet/bathroom walls and floor?

☐

E

Are the flushes and taps of a traditional design?

☐

F

Are basins and baths of familiar design?

☐

Please give examples of good practice/areas of concern

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6

The environment promotes orientation

Questions

Please score each answer from 1 - 5  
(1=barely met, 5=totally met)

A

Do doors have a panel you can see through or do they open against the wall to show where they lead to?

☐

B

Do signs on doors, eg, for toilets or day rooms, use both pictures and words?

☐

C

Are signs hung at a height (approximately 4 foot/1.21m) that makes viewing them easy?

☐

D

Are pictures/objects and/or colours used to help patients find their way around?

☐

E

Are bedrooms/bed spaces personalised, eg, through the use of numbers, accent colours, memory boxes, or personal photographs?

☐

F

Is there a large-face clock easily visible from the bedside?

☐

G

Are patients able to see a calendar in the ward?

☐

H

Is there clear signage in the ward showing the name of the hospital and the ward?

☐


Please give examples of good practice/areas of concern

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7

The environment promotes calm and security



Questions

Please score each answer from 1 - 5 (1=barely met, 5=totally met)

A

Are notices kept to a minimum to avoid distraction and confusion?

☐

B

Are spaces clutter free?

☐

C

Have noise absorbent surfaces been used eg on floors to aid noise reduction?

☐

D

Is noise kept at a level that will enable patients to relax and concentrate?

☐

E

Do patients have any control over the sounds they hear, eg can they listen to their own choice of music?

☐

F

Are doors to exits, 'staff only' areas, etc, disguised, eg by painting the doors and door handles in the same colours as the walls?

☐

G

Are patients cared for in the least restrictive environment possible while maintaining the appropriate level of security, eg, bed rails only used following a comprehensive individual assessment?

☐

H

Are safety and security measures, eg, baffle locks, window restrictors and alarms, as discreet as possible?

☐

I

Are all hazardous liquids and solids, eg, cleaning materials, locked away?

☐

Please give examples of good practice/areas of concern

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Summary

TheKingsFund

Please add your scores for each criterion here

A

B

C

D

E

F

G

H

I

1

The environment promotes meaningful interaction between patients, their families and staff

☐

☐

☐

☐

☐

☐

☐

☐

☐

2

The environment promotes well-being

☐

☐

☐

☐

3

The environment encourages eating and drinking

☐

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☐

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4

The environment promotes mobility

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☐

☐

5

The environment promotes continence and independence

☐

☐

☐

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☐

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6

The environment promotes orientation

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7

The environment promotes calm and security

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The assessment tool is intended to be used in care settings such as acute medical and surgical wards, assessment units and memory and outpatient clinics where people with dementia will be resident or visiting for relatively short periods of time. However, the main principles underlying the tool are applicable in all care settings including home environments.

The King's Fund is taking forward work to adapt the tool for all care settings, including care homes, and is assessing the possibility of adaptation for use in the home.  
For the latest updates, go to:  
[www.kingsfund.org.uk/dementia](http://www.kingsfund.org.uk/dementia)

# Tool 2: Overarching design principles

This second tool comprises a set of principles for creating more supportive environments for people with dementia in hospital, grouped around desired outcomes for people with dementia in ward environments.

Dementia is associated with both sensory loss and cognitive impairment. Effective design of the physical care environment can significantly help compensate for these losses. It can also support the continued independence of people in hospital who have dementia.

To support clinical staff and their estates colleagues, the EHE team has developed this set of five design principles to help hospitals and care environments become more dementia friendly. These principles describe supportive design for people with dementia. They draw on the learning from the acute and mental health trusts that took part in the Environments for Care for People with Dementia programme, along with a comprehensive review of the literature and the findings of the evaluation presented in Chapter 6.

The design wheel shows five sections grouped around the following five desired outcomes:

- easing decision-making
- reducing agitation and distress
- encouraging independence and social interaction
- promoting safety
- enabling activities of daily living.

These principles can be used to help make significant improvements to the physical environment in all settings, to improve the care and wellbeing of people with dementia, by referring to them in discussion and decision-making. For example, they may be useful during conversations between estates and clinical staff during design and refurbishment processes. Using the design principles in this way helps clinical staff to be much clearer about what they need to support patients more effectively. This can result in savings in time and costs.



12 February 2012

Developing supportive design for people  
with dementia: A bibliography

This bibliography lists reference material which has informed the development of The King's Fund resources:

- **Is your ward dementia friendly? - The Enhancing the Healing Environment Assessment Tool**
- **Developing supportive design for people with dementia: design principles**

- Agency for Healthcare Research and Quality 2007, *Transforming hospitals: designing for quality and safety*, Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services.
- Australian Commission on Safety and Quality in Health Care 2009, *Preventing Falls and Harm From Falls in Older People. Best Practice Guidelines for Australian Hospitals*.
- Barrick, A. L., Sloane, P. D., Williams, C. S., Mitchell, C. M., Connell, B. R., Wood, W., Hickman, S. E., Preisser, J. S., & Zimmerman, S. 2010, 'Impact of ambient bright light on agitation in dementia', *International Journal of Geriatric Psychiatry*, vol. 25, no. 1013, p. 1021.
- Boger, J. & Milailidis, A. 2011, *Familiarity and Usability of Products by People with Dementia*, Center for Inclusive Design and Environmental Access, Toronto.
- Brush, J. A., Meehan, R. A., & Calkins, M. P. 2002, 'Using the environment to improve intake for people with dementia', *Alzheimer's Care Quarterly*, vol. 3, no. 4, pp. 330-338.
- Calkins, M. 2002, 'How colour throws light on design in dementia care', *Journal of Dementia Care*, vol. 10, no. 4, pp. 20-23.
- Davis, S., Fleming, R., & Marshall, M. 2009, 'Environments that enhance dementia care: issues and challenges', 3 edn, R. Nay & S. Garratt, eds., Elsevier, Australia, pp. 372-390.
- Daykin, N., Byrne, E., Soteriou, T., & O'Connor, S. 2008, 'Review: The impact of art, design and environment in mental healthcare: a systematic review of the literature', *Perspectives in Public Health*, vol. 128, no. 2, pp. 85-94.
- Department of Health 2011, *Living well with dementia: A National Dementia Strategy*, *Good Practice Compendium - an assets approach*, Department of Health, London.
- Fleming, R., Crookes, P., & Shima, S. 2007, *A review of the empirical literature on the design of physical environments for people with dementia. Translating research into practice*, University of Stirling, Stirling.
- Gate, G. A., Anderson, M. L., Feeney, P. M., McCurry, S. M., & Larson, E. B. 2008, 'Central Auditory Dysfunction in Older Persons With Memory Impairment or Alzheimer Dementia', *Archives of Otolaryngology-Head & Neck Surgery*, vol. 134, no. 7, pp. 771-777.
- Hoof, J. v., Kort, H. S., Duijnstee, M. S., Hensen, J. L., & Begemann, S. H. 2008, 'The indoor environment in relation to people with dementia', in *Indoor Air*, Copenhagen.
- Lowson, K., Kelly, J., Bending, M., Whitehead, S., Wright, D., Powson, P., Duffy, S., Trueman, P., Saxby, R., & West, P. 2011, *Cost-Effectiveness of Hospital Design: Options to Improve Patient Safety and Wellbeing*, York Health Economics Consortium, University of York, York.
- Marshall, M. 2010, 'Environment: how it helps to see dementia as a disability,' *Journal of Dementia Care*, vol. 6, no. 1, pp. 15-17.
- Marquardt, G. 2011, 'Wayfinding for People With Dementia: The Role of Architectural Design', *Health Environments Research and Design Journal*, vol. 4, no. 2, pp. 22-41.
- Namazi, K., Rosner, T., & Rechlin, L. 1991, 'Long-term memory cueing to reduce visuo-spatial disorientation in Alzheimer's disease patients in a special care unit', *The American Journal of Alzheimer's Care and Related Disorders & Research*, vol. 6, no. 6, pp. 10-15.
- Nanda, U., Eisen, S., Zadeh, R. S., & Owen, D. 2011, 'Effect of visual art on patient anxiety and agitation in a mental health facility and implications for the business case', *Journal of Psychiatric and Mental Health Nursing*, vol. 18, pp. 386-393.
- National Ageing Research Unit 2004, *An analysis of research on preventing falls and falls injury in older people: Community, residential care and hospital settings* (2004 update), Australian Government, Canberra.
- NHS Confederation 2010, *Acute awareness. Improving hospital care for people with dementia*, NHS Confederation, London.
- Oliver, D., Connelly, J. B., Victor, C. V., Shaw, F., Whitehead, A., Genc, Y., Vanoli, A., Martin, F. C., & Gosney, M. A. 2006, 'Strategies to prevent falls and fractures in hospitals and care homes and effect of cognitive impairment: systematic review and meta-analyses', *British Medical Journal*, vol. 334, no. 82.
- Passini, R., Pigot, H., Rainville, C., & Tétreault, M.-H. 2000, 'Wayfinding in a Nursing Home for Advanced Dementia of the Alzheimer's Type', *Environment and Behavior*, vol. 32, no. 5, pp. 684-710.
- Pollock, A. 2001, *Designing gardens for people with dementia*, Dementia Services Development Centre, Stirling.
- Pollock, R. 2003, *Designing Interiors for People with Dementia*, Dementia Services Development Centre, Stirling.
- Pollock, R., McNair, D., McGuire, B., & Cunningham, C. 2008, *Designing Lighting for People with Dementia*, Dementia Services Development Centre, University of Stirling, Stirling.
- Pool, J. 2007, *Alzheimer's Society's guide to the dementia care environment*, Alzheimer's Society, London.
- Royal College of Nursing 2011, *Commitment to the care of people with dementia in general hospitals*, RCN, London.
- Royal College of Psychiatrists 2011, *Report of the National Audit of Dementia Care in general hospitals 2011*, RCPsych, London.
- Tadd, W., Hillman, A., Calnan, S., Bayer, T., & Read, S. 2011a, 'Right place - wrong person: dignity in the acute care of older people', *Quality in Ageing and Older Adults*, vol. 12, no. 1, pp. 33-43.
- Tadd, W., Hillman, A., Calnan, S., Calnan, M., Bayer, T., & Read, S. 2011b, *Dignity in Practice: An exploration of the care of older adults in acute NHS Trusts*, HMSO, London.
- Victorian Quality Council 2004, *Minimising the risk of falls and fall related injuries. Guidelines for acute, sub acute and residential care settings*, Metropolitan Health and Aged Care Services Division, Victorian Government Department of Human Services, Melbourne.

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# Project directory

This directory has been compiled from information provided by each of the participating organisations. It provides the location for each scheme, together with total project costs. The project costs are given to the nearest £500 and include VAT. It also lists details of the architects, artists and designers who have contributed to each project.

Trust	<b>Berkshire Healthcare NHS Foundation Trust</b> Formerly Berkshire East Community Health Services
Project location	Henry Tudor Ward
Project address	St Marks Hospital, Maidenhead SL6 6DU
Project	Redesigning social space, therapy and rehabilitation areas
Costs	£242,500
Artists/designers	Chris Lane Fine Art – glass screens
Trust	<b>Bradford Teaching Hospitals NHS Foundation Trust</b>
Project location	Ward 23 and Ward 29
Project address	Bradford Royal Infirmary, Duckworth Lane, Bradford BD9 6RJ
Project	Redesigning and refurbishing two wards
Costs	£659,000
Artists/designers	Karen Clayton, Find Signage – signage Suzi Dear, Big Studio Glass Design – signage, window etchings, fire-resistant glass panels Andy Edwards Design Ltd – designing artwork rails and display boxes Tony Stead, New Vision – constructing artwork rails, display boxes, signage and lampshades
Trust	<b>Cheshire and Wirral Partnership NHS Foundation Trust</b>
Project location	Cherry Ward
Project address	Bowmere Hospital, Chester CH2 1BQ
Project	Creating a balcony garden and social space
Costs	£200,000
Artists/designers	TACP Architects – design and construction
Trust	<b>Cornwall Partnership NHS Foundation Trust</b>
Project location	Garner Ward
Project address	Bodmin Community Hospital, Bodmin PL31 2QT
Project	Creating visitors lounge, kitchen and garden
Costs	£145,000
Artists/designers	Ron Bullock, Building Contractor – construction Dirtworks PC Landscape Architects – design John Knevitt Consulting – structural advisor PGJ Consulting – mechanical and engineering advisers
Trust	<b>Cumbria Partnership NHS Foundation Trust</b>
Project location	Gill Rise Hospital
Project address	Gill Rise, Ulverston, Cumbria LA12 7BT
Project	Redesigning unit entrance and reception and improving corridors and social spaces
Costs	£225,000
Artists/designers	Johnstone & Wright architects – design Kim Crawford, Re-Design Interiors – interior design Adrian Powell – artworks



Trust	Derbyshire Community Health Services
Project location	Spencer Ward, Cavendish Hospital and Riverside Ward, Newholme Hospital
Project address	Cavendish Hospital, Buxton, Derbyshire SK17 6TE Newholme Hospital, Bakewell, Derbyshire DE45 1AD
Project	Improvements to social spaces
Costs	£256,500
Artists/designers	Spencer Ward: Mark Arnold, Derbyshire Community Health Services – design for etched glass screens Beaufort Construction – construction Karlda Lewin and John Parrott, Derbyshire Community Health Services – design Andy Marlor – structural engineer Riverside Ward: Foster Lewins, Derbyshire Community Health Services – design Bagshaws of Bakewell – printed artworks Darren Browett – artwork ‘Fortuitous Novelties’ Jungle Trade Supplies – partitions Patients, carers and staff – artworks Shire Building Services – construction Frank Parker – filming Hugh Wright – scale drawings David Ward Designs – printing images Derbyshire County Council – images of Derbyshire past
Trust	Devon Partnership NHS Trust
Project location	Belvedere Ward
Project address	Franklyn Hospital, Exeter EX2 9HS
Project	Redesigning assessment unit, including internal and external sensory trails
Costs	£65,000
Artists/designers	Martin Dearmun, Opus Glass Design; Juliana Dart, Roberta Ayles, Carlos Zapata, Keith Newstead, Jennie Peach, Carrie Clarke, Mary Sumner, Mary Griese, Sophie Cobb, Carol Griffiths, Brenda Bryan, Heather Cutler, R A Forbes, Valerie Davide, Richard Thorn, Rosemary Bonney, Dick Smith, Paul Cook, Joanna Davies, Staff and Carers – artworks and photographs Devon Wildlife Trust – photographs Flying Fish Artists – paintings and prints Heavenly Gardens – garden design Rodney Hallam, Sean Hellman – furniture and benches St Michael’s C of E Primary School – paintings St Thomas Local History Group – photographs Yuli Somme, Karen Huckvale, Douglas Fitch – workshop facilitators

Trust	Dorset HealthCare University NHS Foundation Trust
Project location	St Brelade's Ward
Project address	Alderney Hospital, Poole, Dorset BH12 4NB
Project	Redesigning lounge, dining area and garden
Costs	£47,000
Artists/designers	Jo Downs Glass – glass artworks
Trust	Hertfordshire Partnership NHS Foundation Trust
Project location	Elizabeth Court
Project address	Gravelly Road, Stevenage SG1 4YS
Project	Redesigning entrance and social spaces
Costs	£360,000
Artists/designers	Pellings LLP – architects Mark Hodgson, Handcreative – artworks Paula Turney, Home Affairs Interiors Ltd – interior design
Trust	Humber NHS Foundation Trust
Project location	Hull Memory Clinic
Project address	Coltman Street, Kingston-upon-Hull HU3 2SG
Project	Redesigning entrance, reception and waiting area
Costs	£102,000
Artists/designers	Rob Atkinson – design Hazel Burnham – glass artworks
Trust	Ipswich Hospital NHS Trust
Project location	Haughley Ward
Project address	Ipswich Hospital, Ipswich IP4 5PD
Project	Ward upgrade
Costs	£64,500
Artists/designers	KLH – architects James Fletcher – garden photographs
Trust	King's College Hospital NHS Foundation Trust
Project location	Marjory Warren Ward
Project address	King's College Hospital, Denmark Hill, London SE5 9RS
Project	Redesigning ward, creating a sensory room
Costs	£270,000
Artists/designers	Lou Abbotts, Sue Attenborough – 'Urban Jungle' quilt Lynne Lindley, Nightingale Associates – interior design Martin Jones – artworks

Trust	<b>Leeds and York Partnerships NHS Foundation Trust</b> Formerly North Yorkshire and York Community and Mental Health Services Partnership NHS Foundation Trust
Project location	Meadowfields
Project address	1a Nelson’s Lane, Tadcaster Road, York YO24 1HD
Project	Redesigning dining room and kitchen
Costs	£47,000
Artists/designers	Ben Hughes – artworks Rick Jesse – design for wall and window manifestations Steve Kershaw – images of York Wall Glamour – window film York Digital Image – photographs
Trust	<b>Leicester Partnership NHS Trust</b>
Project location	Gwendolen Ward
Project address	The Evington Centre, Leicester LE5 4QT
Project	Creating end-of-life/high dependence suite
Costs	£93,000
Artists/designers	Claire Williamson – stained glass
Trust	<b>Lincolnshire Partnership NHS Foundation Trust</b>
Project location	Witham Court
Project address	Fen Lane, North Hykeham, Lincoln LN6 8UZ
Project	Redesigning outpatient waiting area
Costs	£50,000
Artists/designers	Stacey Hartga and Emily Creasey, University of Lincoln students – photographs
Trust	<b>Mersey Care NHS Trust</b>
Project location	Clarence Ward
Project address	Stoddart House, Aintree Hospital, Liverpool L9 7AL
Project	Creating a sensory garden
Costs	£72,000
Artists/designers	Pauling Rowe – poetry TPM Landscapes – garden design
Trust	<b>Poole Hospital NHS Foundation Trust</b>
Project location	Lulworth Ward
Project address	Poole Hospital, Longfleet Road, Poole, Dorset BH15 2JB
Project	Refurbishing ward
Costs	£225,500
Artists/designers	Sue Hunter, Hunter Design Associates – design
Trust	<b>Rotherham, Doncaster and South Humber NHS Foundation Trust</b>
Project location	Windermere Lodge
Project address	St Catherine’s Hospital, Balby, Doncaster DN4 8QN
Project	Redesigning courtyard garden and relocating ward entrance, together with redesign of new main entrance hub
Costs	£98,000
Artists/designers	Gardensco – garden design Suzi Dear, Big Studio Glass – glass artworks Plevey’s – garden construction Steve Walsh – project co-ordinator

Trust	Royal Wolverhampton Hospitals NHS Trust
Project location	Emergency Assessment Unit and Ward D22
Project address	New Cross Hospital, Wolverhampton WV10 0QP
Project	Redesigning entrance and bed bays Creating garden adjoining ward
Costs	£81,000
Artists/designers	Sue Hunter, Hunter Design Associates – design Helen Kitchen – photographs Susan Purser Hope, Caroline Jariwala in collaboration with patients – butterflies and mosaics
Trust	Sheffield Teaching Hospitals NHS Foundation Trust
Project location	Outpatients reception
Project address	Royal Hallamshire Hospital, Glossop Road, Sheffield S10 2JF
Project	Improvements to entrance, reception and ambulance waiting area( A Floor Outpatients)
Costs	£175,000
Artists/designers	Dan Savage – artist Christina Tegolo and Matt Cromack, Nightingale Associates – design
Trust	South Warwickshire NHS Foundation Trust
Project location	Nicol Unit
Project address	Stratford-upon-Avon, Warwickshire
Project	Redesigning social spaces and garden
Costs	£183,000
Artists/designers	Louise Brooks – exterior glass artwork Stuart Hancock, GHW – structural engineers Jeanette Mulkeirins – interior glass artwork Mr Schlulenburg – photographs Stuart Stone, Hitchman Stone Partnership – architects Michael Twite, landscape gardener and architect – garden design
Trust	Taunton and Somerset NHS Foundation Trust
Project location	Sedgemoor Ward
Project address	Musgrove Park Hospital, Taunton, Somerset TA1 5DA
Project	Redesigning ward
Costs	£144,000
Artists/designers	Jenny Dove and Dotty Dollies – quilts Bronwyn Gwilliam, Arts for Life coordinator – glass welcome panel and artworks
Trust	University Hospitals Coventry and Warwickshire NHS Trust
Project location	Ward 40 and adjacent corridor
Project address	University Hospital, Coventry CV2 2DX
Project	Creating the Memory Lane and Forget-Me-Not Lounge
Costs	£65,000
Artists/designers	Jo Chapman – ‘Where Memories Dwell’ Perspex and vinyl artwork Andrea Hannon, arts advisor – project logo John Mason – poem Matilda Morton – Memory Lane tiles Tom Mitchell – ‘Berkswell in Spring’ artwork Sue Woolhouse – glass-panel artworks



# References

- Alzheimer's Society (2009). *Counting the Cost*. London: Alzheimer's Society.
- Commission on Dignity in Care for Older People (2012). *Delivering Dignity*. London: CDCOP.
- Davis S, Fleming R, Marshall M (2009). 'Environments that enhance dementia care: issues and challenges' in Nay R, Garratt S (eds), *Older People: Issues and innovations in care*. Third edition. Chatswood, Australia: Elsevier, pp 372–90.
- Department of Health (2012a). *Prime Minister's Challenge on Dementia: Delivering major improvements in dementia care and research by 2015*. London: Department of Health.
- Department of Health (2012b). *The NHS Constitution for England*. London: Department of Health.
- Department of Health (2011a). *NHS Outcomes Framework 2012–13*. London: Department of Health.
- Department of Health (2011b). *The Operating Framework for the NHS in England 2012–13*. London: Department of Health.
- Department of Health (2011c). *The Right Prescription: A call to action on the use of antipsychotic drugs for people with dementia*. London: Department of Health. Available at: <http://dementia.dh.gov.uk/call-to-action-on-the-use-of-antipsychotic-drugs/> (accessed on 6 November 2012).
- Department of Health (2009a). *Improving the Patient Experience: Sharing success in mental health and learning disabilities*. London: Department of Health.
- Department of Health (2009b). *Living Well With Dementia: A national dementia strategy*. London: Department of Health.
- Department of Health (2008). *End of Life Care Strategy: Promoting high quality care for all adults at the end of life*. London: Department of Health.
- Department of Health (2006). *Improving the Patient Experience, Celebrating Achievement: Enhancing the Healing Environment Programme*. London: Department of Health.
- Dementia Services Development Centre (2008). *Design for People with Dementia: Audit tool*. Stirling: Dementia Services Development Centre, University of Stirling.
- Fleming R, Crookes P, Sum S (2008). *A Review of the Empirical Literature on the Design of Physical Environments for People with Dementia*. Sydney, Australia: Primary Dementia Collaborative Research Centre, University of New South Wales.
- Health Services Management Centre (2012). *Evaluation of the EHE project in HMYOI Feltham Prison*. Birmingham: University of Birmingham, unpublished.
- Hunt J (2012). Speech to National Children and Adult Services Conference (NACS), Eastbourne, 25 October 2012.
- Information Centre for Health and Social Care (2011). *Hospital Estates and Facilities Statistics for 2010–2011*. London: Department of Health.

- Marshall M (2010). 'Environment: how it helps to see dementia as a disability'. *Journal of Dementia Care*, vol 6, no 1, pp 15–17.
- Medical Architecture Research Unit (2003). *Evaluation of the King's Fund's Enhancing the Healing Environment Programme*. London: Department of Health.
- Medical Research Council (2008). *Developing and Evaluating Complex Interventions: New guidance*. London: Medical Research Council.
- National Audit Office (2010). *Improving Dementia Services in England: An interim report*. London: NAO.
- NHS Confederation (2010). *Acute Awareness: Improving hospital care for people with dementia*. London: NHS Confederation.
- NHS Institute (2012). *The Right Care: Creating dementia friendly hospitals*. London: NHS Institute.
- Nightingale F (1863). *Notes on Hospitals*. London: Longman, Green, Longman, Roberts and Green.
- Royal College of Nursing (2011). *Commitment to the Care of People With Dementia in General Hospitals*. London: RCN.
- Royal College of Psychiatrists (2011) *Report of the National Audit of Dementia Care in General Hospitals*. London: RCP.
- Sainsbury Centre for Mental Health (2009). *Evaluation of the Enhancing the Healing Environment Prison Pilots Programme*. London: SCMH, unpublished.
- Sue Ryder Centre (2010). *Environments of Care at End of Life: Evaluation of The King's Fund Enhancing the Healing Environment programme*. Nottingham: University of Nottingham
- Prince's Foundation for the Built Environment/The King's Fund (2010). *Principles of Hospice Design*. London: The King's Fund.
- Waller S, Finn H (2011). *Environments for Care at End of Life: The King's Fund's Enhancing the Healing Environment programme 2008–2010*. London: The King's Fund.
- Waller S, Dewar S, Masterson A, Finn H (2008). *Improving Environments for Care at End of Life: Lessons from eight pilot sites*. London: The King's Fund.
- Ulrich RS (2001). 'Effects of healthcare environmental design on medical outcomes' in Dilani A (ed), *Design and Health: Proceedings of the Second International Conference on Health and Design*. Stockholm, Sweden: Svensk Byggtjänst, pp 49–59.
- Zekry D, Hermann FR, Grandjean R, Vitale AM, De Pinho MF, Michel JP, Gold G, Krause KH (2009). 'Does dementia predict adverse hospitalization outcomes? A prospective study in aged inpatients'. *International Journal of Geriatric Psychiatry*, vol 24, no 3, pp 283–91.



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