

Report for New Cross Hospital

An evaluation of quality and cost effectiveness of a newly defined suite of care interventions for patients with dementia and their carers in the acute hospital setting developed by The Royal Wolverhampton Hospitals NHS Trust

REPORT PHASE 2 – Volume 1

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Executive summary

The Background

Within the acute hospital some 60% of beds are occupied by older people. 40% of these patients are likely to have dementia (NAO, 2007) and be at particular risk of poor quality care (Saad, Smith and Rochfort 2008).

In recognition of these challenges and to address the lack of an existing intervention for dementia, the innovative and exciting two-year Delivering Excellence in Dementia Care in the Acute Hospital programme was established. The project was commissioned and supported by NHS West Midlands and was undertaken by the Royal Wolverhampton Hospitals NHS Trust, Wolverhampton Primary Care Trust and Wolverhampton Metropolitan Borough Council. Learning gained from the delivery of the programme of work at New Cross Hospital was shared with other local, national and international colleagues.

The Project

As part of the project a suite of evidence-based interventions was developed and implemented to provide a new model of specialist dementia service for the acute hospital. This aimed to improve the outcomes for people with dementia and their families. The suite of interventions consists of:

- A care bundle approach for patients with dementia – ensuring that information was gathered from families to maximise communication, nutrition & hydration, and the physical environment for each individual patient. This forms the basis of the wider care planning system for personalised care;
- A specialist dementia acute medical ward – providing an appropriate environment for people with dementia where staff can implement the care bundle;
- A Dementia Outreach Team – identifying patients for admission to the specialist ward and supporting use of the care bundle on other wards caring for people with dementia;
- Trained volunteer buddies – supporting staff and patients on the specialist ward by following the principles of the care bundle approach;
- Staff training and development: The Dementia Training Programme – providing courses for all staff at all levels;
- Dementia-friendly physical environment – implementing dementia-friendly design principles in the specialist ward and across the wider hospital;
- The integrated dementia pathway – ensuring people with dementia and their families receive a quality service from beginning to end;
- Organisational leadership and commitment to implementing excellence in dementia – support and engagement to make the delivery of high quality care a priority and bring about a culture change at all levels across the Trust.

The Evaluation

An evaluation of the project was commissioned by the SHA and Royal Wolverhampton Hospitals NHS Trust, and was led by the University of Worcester. The evaluation used both qualitative and quantitative measures to gather data and assess the impact of the project. The complexities involved in the evaluation should not be underestimated, and the main issues encountered were that:

- The suite of interventions had only been implemented for a year when the evaluation was complete, so the amount of available data was limited to some extent;
- As the suite of interventions represent a new way of working, it was difficult to carry out direct before and after comparisons as it was not possible to compare like with like.

Assessing the cost benefit of the interventions and the changes to clinical practices was also very difficult due to issues around the identification of patients with dementia, the availability of data, and staff capacity to extract relevant data from the hospital system.

Key findings from the evaluation

There is little evidence of interventions for patients with dementia in acute hospitals, and this project was innovative in its concept and approach.

At New Cross Hospital there is a prevalence of dementia within the in-patient population of 11%-19%, although up to 50% of these will not have a formal diagnosis. Patients with dementia are generally very poorly, quite frail and often approaching the end of life. However, levels of acuity, in the sense of requiring services only an acute hospital can provide, are relatively low.

Two of the key factors underpinning the implementation of the suite of interventions and the success of the project have been the leadership and support at all levels of management, from the Chief Executive down, and the project planning and management.

New Cross Hospital has made significant progress towards becoming a dementia-friendly hospital in line with the National Audit of Dementia recommendations. Improvements have been seen in a number of areas including:

- Providing information to patients and their families
- Personal care and nutrition on the specialist ward
- Staff training and support
- Organisation at a hospital level and at a ward level
- Access to services
- The ward environment on three key wards for patients with dementia

Appropriate cost benefit data was difficult to access, but work carried out during the evaluation has resulted in systems being put in place to make future analysis easier.

The impact of the suite of interventions

Care for people with dementia is delivered in a more personalised manner:

- People with dementia are more readily identified within the hospital due to an improved flagging system, which is a key step towards being able to meet individual care needs;
- The suite of interventions, in particular the care bundle approach and the 'About Me' document, have improved the provision and quality of dementia care and care planning on the specialist ward, on other wards and across the wider hospital at an organisational level;
- Relationships and communication between staff, patients and their families have improved as they feel like a valued and respected part of the care process;
- The environment on the specialist ward enables patients to be more orientated, and the wider hospital environment has become more dementia-friendly.

The implementation of the suite of interventions has had a positive impact on patient outcomes on the specialist ward:

- Patients are subjected to fewer moves between wards, reducing potential confusion and distress;
- Hospital acquired chest/pneumonia infections and urinary infections appear to be under control;
- Patients are less likely to lose weight due to improved nutrition and hydration;
- Patients are encouraged to remain mobile, yet there have been a low number of falls;
- No patients have experienced multiple falls;
- An increasing number of patients are returning to their own homes.

Patient and carer satisfaction has improved:

- The high level of care has had a positive impact on both patient and family well-being;
- The specialist ward is seen by carers and families as an achievement for the hospital, whose should be shared more widely at a national level;
- The Dementia Outreach Team is held in high regard, with patients and carers seeing it as providing a valuable service and support;
- Since opening in November 2010 the ward has not received any dementia-related complaints.

Staff are more skilled and confident, and use a team-based approach to dementia care:

- Staff knowledge and understanding of dementia has improved across New Cross Hospital as a whole;
- The Dementia Outreach Team and Training Programme have both been key in raising dementia awareness and understanding, not just on the specialist ward but across the hospital as a whole;
- The trained and dedicated volunteers are an essential part of the dementia team.

Staff satisfaction has improved:

- Staff and volunteers on the specialist ward feel valued, as a culture of support has been developed and there is an acknowledgement that they are doing something special.

The project has been beneficial to the organisation as a whole:

- There has been a culture change due to the heightened awareness and understanding of dementia among staff at all levels;
- The team is building stronger relationships with services both within and outside the hospital, such as the dedicated Social Work time on the specialist ward, and there is a better awareness and understanding of each others' roles;
- Engaging support services within the hospital has encouraged them to take a broader and more flexible approach, applying their new knowledge of dementia across the wider hospital;
- Work from the specialist ward, such as the physical environment and the care bundle approach, has been extended across other areas of the hospital.

There have been some cost benefits for the hospital, although not to the extent that was anticipated:

- The specialist ward has seen no staff turnover and low sickness levels, reducing the need for bank staff and resulting in a direct cost saving between £11,700 and £21,700 per year;
- The reduction in complaints has also had a positive financial impact, with the specialist ward saving nearly £16,000 per year compared to the average number of complaints for a ward;
- The complexity of gathering cost benefit data should not be underestimated, but the systems are now in place to make data extraction easier in the future.

The wider health and social care economy has also seen a potential positive financial impact from the project:

- Delaying admission to a care home could potentially outweigh the cost of a longer hospital stay, with the savings being seen by Social Care rather than the NHS.

Some areas require further development as they have not improved as anticipated:

- Length of stay has not reduced as expected, and is linked to issues around timely discharge for people with dementia;
- It is potentially too soon to see a difference in length of stay due to the numerous changes that have taken place during the first year of operation. A longer period of stability may be required to get a more accurate reflection of the impact of the suite of interventions in this area;
- In the future, being able to reduce length of stay per person with dementia by a single day could result in a direct gain to the Trust of over £300,000.

Advice and lessons learnt from the project implementation and evaluation

The unique care bundle is at the core of the suite of interventions but cannot be implemented in isolation:

- The suite of interventions needs to be implemented together using a composite approach, where all elements support each other. Implementing the care bundle by itself will not achieve a hospital-wide change in culture and practice;
- A culture change was required within the organisation, and commitment from all levels of management down is essential.

Project planning and management with a clear project structure are key to successfully implementing the suite of interventions:

- Engagement from services both within and outside the hospital is required from the start of the project to ensure all parties work together towards a common goal;
- The time and effort required to plan and implement the project with engagement from relevant parties should not be underestimated.

Appropriate systems and personnel need to be in place to understand the cost benefit impact of the suite of interventions.

Dementia training should be undertaken by staff and volunteers at all levels.

Future support for the suite of interventions

The Dementia Outreach Team must be supported to develop their service in the future, including the Dementia Action Network, as it could have a significant impact on the quality of care for patients with dementia across New Cross Hospital as a whole.

It is essential that the Dementia Training Programme continues to deliver and develop its courses, and a strategy for taking this forward needs to be defined.

1 Introduction

1.1 Project context

Dementia is one of the biggest health and social challenges facing the developed world, with 5% of people aged over 65 and 20% of those aged over 80 having dementia. This equates to around 800,000 people in the UK, with many more remaining undiagnosed. The number of people with dementia will continue to rise as the age of the population rises, with evident implications for care provision (Luengo-Fernandez, Leal and Gray, 2010).

Within the acute hospital older people occupy some 60% of beds and of these 40% are likely to have dementia (NAO, 2007). As highlighted by the West Midlands Darzi Dementia report (Saad, Smith and Rochfort, 2008) patients with a dementia diagnosis in acute hospitals are at particular risk of poor quality care. The National Audit of Dementia (Royal College of Psychiatrists, 2010; RCP, 2011) also identified a number of key issues:

- People with dementia admitted to hospital do not consistently receive the necessary assessments;
- The vast majority of the hospital workforce receive no mandatory diagnosis-specific training;
- The vast majority of hospitals have no clear procedure for identifying people with dementia and sharing information about care needs with staff;
- Most staff felt that staffing levels were insufficient to meet patient needs;
- There was a need for additional guidance on involving families in patient care, discharge and support arrangements;
- Discharge, delayed transfers and readmission of people with dementia are areas of need;
- The majority of hospitals are unable to identify the cohort of people with dementia within reported figures such as falls;
- The physical ward environment is generally not appropriate for people with dementia.

The York Health Economics Consortium was commissioned by NHS West Midlands to identify existing interventions for dementia which could be transferred to the acute hospital setting, and to explore the evidence base for the development of a care bundle. The results found that *“research evidence about interventions for dementia/delirium in the acute care setting is sparse”* and indeed *“no existing care bundles in dementia/delirium were identified”* (York, 2009).

There was therefore a clear need for a significant piece of work to be undertaken to develop a new intervention specifically for dementia in order to meet the Darzi report (Saad, Smith and Rochfort, 2008) and National Dementia Strategy (DH, 2009) goals of supporting and improving care for people with dementia who are admitted to acute hospitals.

1.2 Project overview

The two-year Delivering Excellence in Dementia Care in the Acute Hospital programme was commissioned and supported by NHS West Midlands using Innovation Funding from the Department of Health. The project was undertaken by the Royal Wolverhampton Hospitals (RWH) NHS Trust, Wolverhampton Primary Care Trust and Wolverhampton Metropolitan Borough Council, and officially began at the end of June 2009. When New Cross Hospital Chief Executive David Loughton agreed to lead and proceed with the work, it was also agreed with his Acute sector Chief Executive colleagues that he would do this on their behalf, that all end products and learning would be shared with them, and that they would adopt these at the formal end of the development and testing period.

1.3 Project aims

At the project launch event in November 2009, the following aims were agreed:

- Ensure anyone with a diagnosis or symptoms of dementia receiving treatment at the Royal Wolverhampton Hospitals receives care which demonstrates best clinical practice and is cost effective, whilst also providing individuals with respect, dignity and compassion;
- Develop a suite of evidence-based interventions, including a unique care bundle to provide a consistent, reliable quality of care;
- Minimise the adverse impact of temporary relocation to a hospital setting by considering factors such as the physical environment, daily interpersonal communication, nutrition and hydration, management of symptoms, and an individualised approach to care;
- Actively involve people with dementia and their carers/family in the development of services in Wolverhampton;
- Ensure that all staff and volunteers are dementia aware and relate to the person with dementia in a person centred way, and that professionals and specialist staff have competencies around advanced practice in dementia care;
- Work with partner organisations particularly General Practitioners, Primary Care Trust, Local Authority and Third Sector Organisations to agree effective pathways of care in the most appropriate setting in a timely and consistent manner;
- Evaluate the impact of new services, review practice in the light of this and share this learning with others in the West Midlands, nationally and internationally.

1.4 Project evaluation

The Strategic Health Authority (SHA) and RWH NHS Trust commissioned an evaluation of the project which was led by the University of Worcester. The approaches employed during the evaluation included:

- Collecting quantitative data for each element of the suite of interventions/care bundle;
- Collecting qualitative data for each element of the suite of interventions/care bundle;
- Conducting interviews with a wide range of stakeholders in the evaluation;
- Conducting two point prevalence surveys.

Opinions were sought from staff, the patients themselves, their carers and families, volunteers and key stakeholders who were connected to the project. The complexities involved in the development of the service and the evaluation should not be underestimated.

One of the main complexities related to assessing the cost benefit impact of the suite of interventions and the resulting changes to clinical practice due to difficulties with accessing data. These difficulties will be discussed where relevant throughout the report.

1.5 Report structure

This report provides a summary of the suite of interventions and the work done within the project in order to implement the interventions. It also investigates the impact of the suite of interventions on four key areas, namely:

1. Patients and their carers/families
2. Staff
3. At an organisational level
4. The wider health and social care system

Supporting evidence from the evaluation is provided separately in Volume 2 of this report.

2 The suite of interventions

2.1 Development of the suite of interventions

2.1.1 *Patients with dementia at New Cross Hospital*

An initial point prevalence survey (PPS) was carried out in 2009-2010 and analysed data collected by New Cross Hospital on its Patient Administration System (PAS). The PPS was repeated in 2010-2011, providing information regarding the number of patients with dementia before and after the implementation of the suite of interventions:

- In 2009-2010 there were 1,356 in-patient spells in the year, rising to 1,591 in 2010-2011:
 - 264 of these died in hospital in 2009-2010 (343 in 2010-2011);
 - The average length of stay increased from 11.7 days in 2009-2010 to 12.7 days in 2010-2011;
 - On an average day in 2009-2010 44 patients with a recorded diagnosis were occupying beds. The figure for 2010-2011 was 56.
- In financial terms, this translates as:
 - An annual cost of £4.2 million at the national tariff in 2009-2010 rising to £5.2 million in 2010-2011;
 - An average cost per spell of £3,100 in 2009-2010 (£3,300 in 2010-2011).

The increase in the number of patients was partly due to improved coding and flagging of patients with dementia on the PAS. Patients with dementia require a higher level of care which is reflected in the additional tariffs payable, as coding for 70% of the patients in 2009-2010 indicated a median additional tariff per patient of £1100. As the coding system improved, the number of cases identified in 2010-2011 increased by 235. If 70% of these incurred a higher tariff than if they had not been identified, the increased income chargeable to the Trust would have been approximately £180,000. However, it should be noted that any gain to the Trust would be an equivalent loss to commissioners.

The PPS identified a prevalence of dementia within the in-patient population of 11%-19%, however, up to 50% of these patients will not have a formal diagnosis. A number of other key points were also identified:

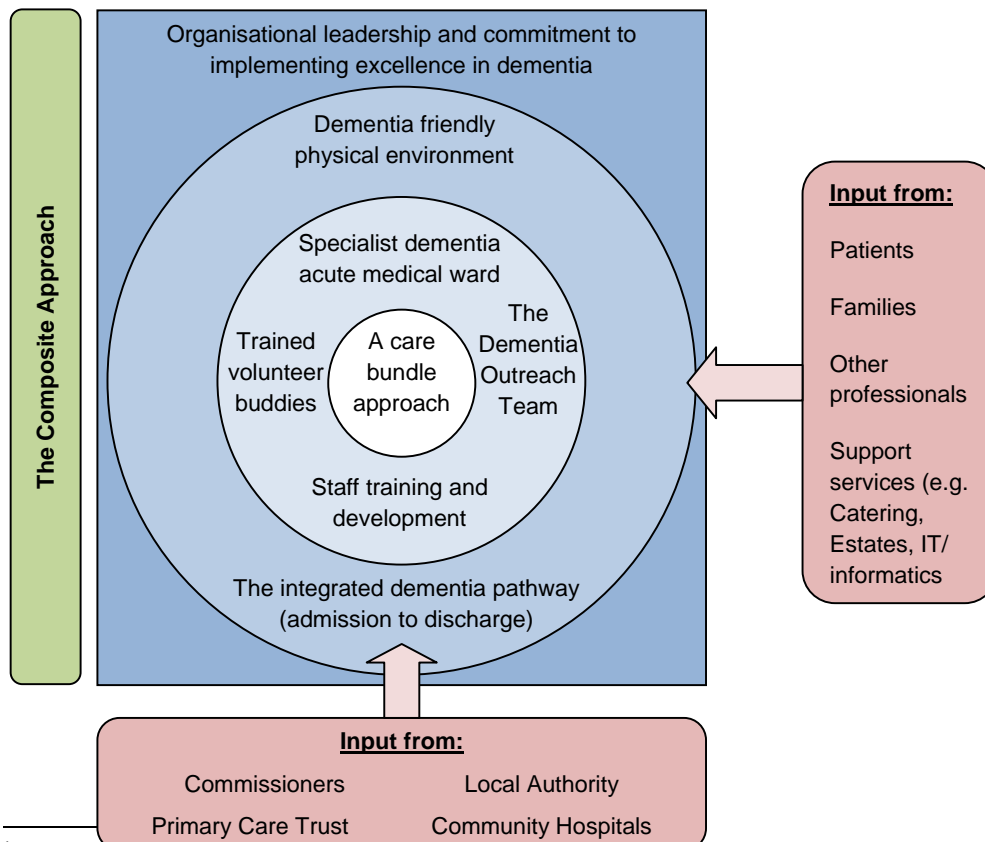
- There were 50% more females than males in the dementia in-patient population, attributable to much higher numbers of females over 85. This is consistent with prevalence estimates for the whole population;
- Co-morbidities were common, especially hypertension and stroke;
- Levels of frailty were high: Most patients needed some help with activities of daily living, with over half needing help with feeding. Over 50% were incontinent, including over 33% who were doubly incontinent;

- Other morbidity measures assessed patient condition against the Gold Standards Framework (GSF, 2011) criteria, and indicated that 46% could be considered to be in the 'Last Year of Life' in GSF terms;
- Levels of acuity were low: 28% of admissions were outside Appropriateness Evaluation Protocol (AEP) criteria for acute hospital admission. Many could have remained at home, or in a care home, if services had been available at the time;
- Similarly, 66% of patients surveyed were outside the AEP 'day of care' criteria on the survey day, i.e. these patients did not need to remain in an acute hospital to meet their care needs if alternative services were available.

This information illustrates that patients with dementia are in general very frail and often approaching the end of life. However, levels of acuity, in the sense of requiring services only an acute hospital can provide, are relatively low.

2.1.2 Overview of the suite of interventions

New Cross Hospital led the development and testing of a suite of evidence-based interventions. The suite of interventions (using the composite approach¹) provides a new model of specialist dementia service for the acute hospital, requiring a change in care culture as it emphasises the need for person centred care and the relevant training and development of the staff involved. The elements of the suite of interventions are closely interlinked as indicated in *Figure 1*, with central elements requiring the implementation and support of the elements in the outer layers.



¹ A composite approach is a set of evidenced-based interventions which all need to be in place and drawn on to provide a consistent quality of care.

Figure 1: The suite of interventions

2.1.3 The implementation process

The key points during the project planning and implementation process are shown in *Table 1* and indicate that the implementation work involved many key parties. It is also an ongoing and evolving process which has continued during the first year of operation on the specialist ward, with elements such as the members of the Outreach Team and the Dementia Trainer coming in to post after the ward had already opened. This had an impact on the evaluation which took place between December 2010 and December 2011, as the underlying situation for both the ward and the wider hospital changed across the year.

Table 1: Project timeline – planning and implementation

	2009	2010	2011
January		Person Centred Care (PCC) Group established; Early pilot of care bundle	Ward D22 operational; Training courses developed
February			
March		Dementia Capital Build Project Group established	Ward D22 garden completed
April		Evaluation Project Group established; Care bundle adapted	Audit indicates high compliance with care bundle
May			
June	Project started; Project manager appointed		Project ended; Official ward opening
July	Steering Group established	Ward D22 intended to be open; Care bundle pilot; Volunteer induction	Dementia Outreach Nurse recruited to Outreach Team
August	Literature search initiated		
September			
October	Literature search completed; Medical Therapeutic Group established; Expert advisor appointed	Medical Therapeutic Group and PCC Group combined; Care bundle finalised; Dementia trainer advertised	First group of student nurses on ward D22
November	Project launch event	Ward D22 opened	Ward D22 open for 1 year; Care bundle pilot on ward D8
December		Consultant Nurse recruited to Outreach Team; Dementia Trainer recruited	Care bundle pilot on ward D5

2.2 The elements of the suite of interventions

2.2.1 A care bundle approach to patients with dementia

A unique feature of the project has been the development of a care bundle² for dementia which was guided by Dr Roger Resar from the Institute for Health Improvement. The dementia care bundle consists of three elements:

1. **Communication** – staff respond to a patient whenever they ask for attention or indicate a need. Patients who don't indicate a need are approached at regular intervals to ensure they are feeling OK. Staff responding to patients will deal with any immediate concerns and know who to report to if they cannot ameliorate the situation or if it is an indicator of something more problematic.
2. **Nutrition and hydration** – staff ensure that the patient has an adequate amount to eat and drink.
3. **The environment** – the physical environment is designed to be dementia-friendly and is straightforward for patients to negotiate their way round. For example, they can see someone who could assist them, they can see the toilet sign, and they can see something familiar to them. If being nursed in bed, a patient has orientating/familiar objects in their eye-line and their bed is in a low position.

In order for staff and volunteers to implement the care bundle in a person centred way, a document called 'About Me' is completed with the patient's family or significant others before or on admission to gather personal information and preferences covering:

- Information specific to communication, food and drink and a safe environment;
- Details of the help required by the patient around personal care needs, medical interventions, regular routines and personal preferences;
- Details of what the patient is like and who they are.

The information gathered by the 'About Me' document and the care bundle approach is also used in wider care planning. A new system has been put in place to support care planning, which considers longer term care rather than just the care a patient receives in hospital. For example, the support services a person will need following discharge, or those required to enable a person to return home, are considered and action is taken to put them in place.

Implementation

As the care bundle represented a new way of working for staff at New Cross Hospital, a checklist was used to encourage staff to implement the different elements. This involved staff interacting with each patient in their care at least once every hour and signing a form to say that they had complied with a number of points relating to that patient's communication, nutrition and environmental needs. Overall, the checklist was very successful as it got staff into the habit of

² A care bundle is "a structured way of improving the processes of care and patients outcomes: a small straightforward set of evidence-based practices – generally in three to five – that, when performed collectively and reliably, have been proven to improve patient outcomes." (IHI, 2009)

using the new approach as part of their everyday work. In addition, a random audit tool based on the checklist was used to monitor continued compliance with the care bundle.

2.2.2 The specialist dementia acute medical ward

The acute medical ward for patients with a physical illness and dementia was used as a Centre of Excellence for the test and development of the unique care bundle approach. The new ward was a transfer of an existing 28-bed Care of the Elderly ward (D7). It was redesigned and refurbished, and was opened on a different part of the hospital site as a 20-bed specialist ward (D22) for patients with acute medical conditions who also have dementia. Due to the lower number of beds, the staffing ratio on D22 is higher than on D7. Staff were transferred from the old care of the elderly ward, and the ward environment has been altered with emphasis placed on colour schemes, lighting, spacing and signage as described in Section 2.2.6.

The philosophy of the specialist ward is:

- To provide person centred care for patients with dementia and an acute physical illness at New Cross Hospital using our unique care bundle;
- To facilitate timely and appropriate comprehensive acute medical treatment. This will include medical and nursing care, physiotherapy and occupational therapy, psychiatric and social care treatment and assessment where appropriate;
- To recognise the importance of primary carer knowledge and skills and use them as a rich source of information for staff to deliver appropriate and person centred care;
- To improve quality of care, morbidity and mortality by appropriate use of specialist knowledge;
- To reduce length of stay and maintain independence of the individual patient;
- The ward will not provide respite, step-down, temporary or long term care.

One of the key points to note about the ward is that it is not a 'dementia ward' but an acute medical ward designed for patients with a physical illness who also have dementia. This is a subtle but important distinction as it can prevent misconceptions about the ward for patients, families and professionals alike.

As part of the project, additional support for ward D22 was provided in the form of Social Workers having time dedicated to be on the ward and to attend multi-disciplinary team meetings in order to be a more integrated part of the wider care planning process for each patient.

Implementation

The decision on whether or not to have a specialist ward took around six months to resolve during the planning phase, but was felt to be the best solution for New Cross Hospital. A deciding factor in choosing to have a dedicated ward was that it enabled the care bundle approach to become embedded in practice. Operational guidelines were written for the ward to support the care bundle implementation, for example having staff workstations in the bays, making changes to the handover process between staff, and adjusting the staff rota to ensure that the right number of staff are available when required.

2.2.3 The Dementia Outreach Team

The Outreach Team is a multi-disciplinary team comprising a Consultant Nurse for Dementia Services, a Dementia Outreach Nurse, a Dementia Outreach Occupational Therapist and dietetic input. It is actively supported by a Consultant Geriatrician and the Dementia Trainer. Wider support is provided by the Dementia Action Network (DAN), which was initiated in June 2011 and is being developed across the hospital to cover all clinical areas where patients with dementia are seen. The DAN is comprised of staff members who have undergone specialist dementia training and are willing to act as dementia champions in their areas of the hospital.

The Outreach Team is available Monday-Friday from 9am until 5pm and patients can be referred to the Team from all disciplines within and external to the Trust. A proactive approach is also taken by the Outreach Team who aim to identify patients who are known to have dementia or who have a suspected dementia diagnosis when they are admitted to the hospital.

The role of the Dementia Outreach Team

The Outreach Team acts as a gateway for advice and support to wards and departments in the wider hospital and identifies patients who could benefit from admission to D22. Where admission to the specialist ward is not possible or not appropriate, the Outreach Team provide advice and support on other wards. This can be in the form of staff education and training, care management and planning, and liaising with families and carers.

The Outreach Team is primarily involved as a resource to patients, carers and ward staff who are less experienced in caring for people with dementia. They are not a replacement for the existing teams and systems e.g. Duty Social Worker, Continuing Care Assessor or Independent Mental Capacity Adviser. The Outreach Team work closely with the Liaison Psychiatric Team, and in the future aim to have access to the Mental Health Case Notes database.

The Dementia Outreach Team is also piloting the use of the dementia care bundle on wards D8 and D5 to illustrate how it can work for patients with dementia on general medical wards, with the longer-term aim being to roll it out across the wider hospital. This should be monitored to identify and resolve potential issues with applying the care bundle approach on other wards.

Implementation

The Outreach Team was intended to start in November 2010 when the specialist ward opened, but the Consultant Nurse Lead was not in post until late December 2010. Issues with recruitment also meant that the additional Outreach Nurse was not in post until July 2011. Both posts were advertised at least twice, but none of the applicants in this initial wave of recruitment were felt to have required skill set. This highlights one of the potential issues with developing a new way of working, as it can be more difficult to recruit staff if a more specialist set of skills is required. Any Trusts looking to implement a model similar to the one used at New Cross Hospital would need to include sufficient time in the planning phase to cover recruitment.

Future Outreach Team developments

Although the Outreach Team took a while to become fully operational, its members have already identified a number of areas that they wish to develop in the future, including:

- Developing the DAN, both in terms of the knowledge of the members and their reach across the hospital;
- Building better links with the Accident and Emergency department;
- Having a group of volunteers allocated to the Outreach Team, who can help with patients on other wards to avoid unnecessary bed moves, or accompany them when they go for scans/x-rays to prevent agitation and distress;
- Making more use of the skills of their Occupational Therapist;
- Working more closely with a wider range of wards to implement the care bundle approach:
 - Developing a pack or folder for each ward containing relevant documentation and information;
 - Adapting the implementation of the care bundle to suit the strengths and weaknesses of staff on each ward;
 - Gathering information and statistics to illustrate how the care bundle is making a difference.

Supporting the Outreach Team to take these ideas forward could have a significant impact on the care provided for patients with dementia across New Cross Hospital as a whole.

2.2.4 Trained volunteer buddies

Volunteers have a prominent role in the specialist ward, particularly with regard to supporting and maintaining the use of the care bundle. They have undergone training to understand more about dementia and to make them aware of their role regarding the care bundle and the 'About Me' document. Volunteers have been recruited to help out in different positions on the ward, including dementia buddies, reception helpers and art facilitators. All roles are designed to help support patients with dementia, and the volunteers have regular interactions with the patients including talking with them, taking part in activities and helping with food and drink provision.

The volunteers are integral to ward D22 and have an important role supporting the staff as well as the patients. There is now a mainstay of volunteers that are regularly on ward D22 who have *"all got their own individual skills"* and *"all taken on different roles really."* The work being done by the volunteers has been recognised beyond ward D22 and they won the 'Best Team of Volunteers' award within the Royal Wolverhampton Hospitals.

Implementation

It was found that project delays caused some initial issues as some volunteers changed their minds about volunteering or chose to work on other wards before the specialist ward opened. It is therefore necessary to engage volunteers at an appropriate stage in the implementation process, and to appreciate how their needs and approach differ from those of paid staff.

2.2.5 Staff training and development – The Dementia Training Programme

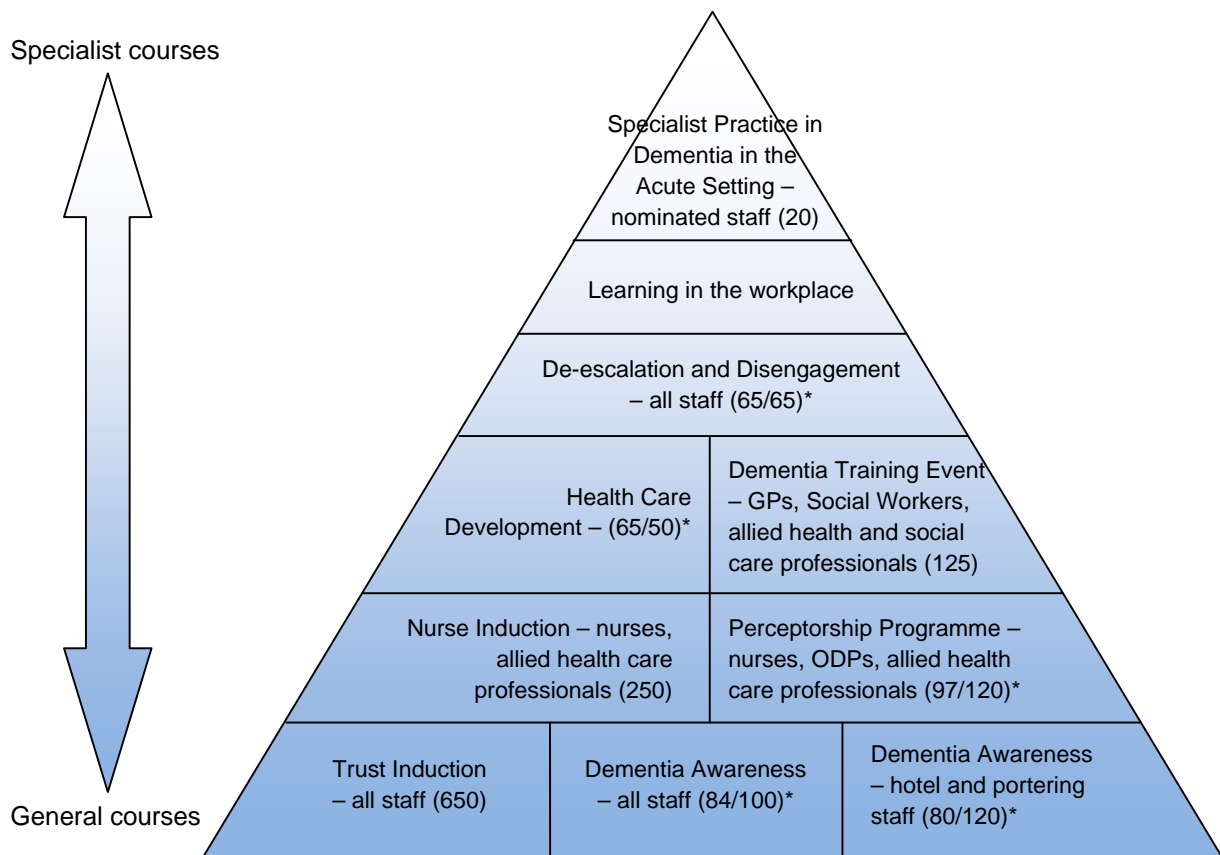
The aim at New Cross Hospital was to provide people with high quality dementia care and a service that is “*sensitive, effective and person-centred*” (RWH, 2011). This requires all staff involved in providing this service to be trained in all aspects of dementia care, so a Dementia Training Programme was developed and designed using “*information gathered from clients, carers, volunteers, care staff and recommendations from national guidelines*” (RWH, 2011). The training was aimed at a wide range of health and social care staff and volunteers, and was important in enabling them to understand the principles behind the new care bundle approach.

Provision of courses

To cater for the range of staff, the training sessions cover a variety of topics at different levels, from general ‘Dementia Awareness’ courses aimed at all staff, through to specialist courses designed for small groups of key staff such as those working on the specialist ward D22. The range of courses and the number of staff attending them is shown in *Figure 2*. Many of the courses, particularly the more general ones, are intended to be on-going courses that are repeated at regular intervals to address the issue of staff turnover.

In addition to the courses shown in the training pyramid, a range of short workshops and on-line courses are also on offer, including:

- Assessing Risk in Dementia Care Delivery (15 staff already completed course);
- Understanding Delirium, Depression and Dementia (18 staff already completed course);
- Promoting Person Centred Care;
- Introduction to the Mental Capacity Act (94 staff already completed the course);
- Assessing and Managing Pain for People with Dementia;
- Introduction to Dementia: Basic Awareness;
- Internship Programme (7 staff already completed the course).



* (staff completed training as of November 2011/ completing training in 2012)

Figure 2: Dementia training pyramid

Implementation

The Dementia Trainer was intended to be a full-time position who would be in post when ward D22 opened, but the position had to be advertised twice, meaning that they were not employed until December 2010. An agreement also had to be reached with their employer to release the trainer to New Cross Hospital on secondment, so they were only actually able to work in a part-time capacity of 3 days per week. These issues presented a challenge as they had to plan, design and develop new courses at the same time as trying to deliver others. It was strongly felt that having the Dementia Trainer in place earlier would have been beneficial, as it would have enabled a proper skills analysis to have been carried out to identify what training was required, and given more time to plan courses in advance. The time required to plan training courses should not be underestimated, and should be taken into account in any project plans.

Future training developments

As a result of the Dementia Training Programme it is felt on ward D22 that “we’re on top of our training, it’s just a matter of keeping the momentum and keeping people updated”. However, staff are still encouraged to identify areas where further training would be useful. Three such

areas are person centred care planning, speech and language therapy, and Deprivation of Liberty Safeguards, the first of which is currently being addressed by a new training course.

It should be noted that from November 2011 the Dementia Trainer is only contracted to provide 24 days of training over the following 12 months. In terms of sustaining the Dementia Training Programme in the future, key personnel identified that one way forward could be for the Outreach Team to lead some of the courses or for the DAN members or D22 staff to sustain the work. A strategy for maintaining the momentum of the Training Programme needs to be developed to ensure that the positive work achieved so far is built upon in the future.

2.2.6 Dementia-friendly physical environment

Patients with dementia often find the acute hospital environment intimidating and alien, causing confusion, agitation, disorientation and fear. This can have a damaging effect on physical and psychological health and well-being, which in turn can result in increased length of stay. It is therefore important that areas of the hospital which are frequently used by patients with dementia should incorporate dementia-friendly design principles. The main area where a dementia-friendly environment was essential was the new specialist ward D22, but two further areas were focused on during the project as part of the 'Enhancing the Healing Environment' Programme (DoH, 2010).

Enhancing the healing environment

In February 2010 New Cross Hospital successfully bid for funding from the King's Fund 'Enhancing the Healing Environment' Programme (DoH, 2010), which focused on improving facilities for patients with dementia in acute hospitals. This programme facilitated the design of the D22 garden which was completed in May 2011. The importance of the garden was recognised outside the hospital as it was a finalist in the 'Best Exterior Dementia Design' category at the 2011 National Dementia Care Awards. The programme also funded a redesign of the Emergency Assessment Unit, which was carried out with input from Estates, Ward/Clinical staff and Carers. The work aimed to reduce stress, increase safety and prevent disorientation amongst patients with dementia.

The physical environment on ward D22

The design of ward D22 focused on creating an environment that was *"much more user friendly for people with dementia"* in terms of elements such as:

- Flooring – the floors are plain with a matt finish, and there is a clear distinction between the floor and the skirting. The floors in the bathrooms are non-slip;
- Signage – the signs have bold white writing and images on a red background. Toilet signs are visible within the bay areas;
- Doors – some doors are coloured so that they are concealed to prevent patients trying to open them, while others are highly visible to encourage patients to go into certain areas;
- Lighting – natural light is used where possible, but artificial lighting is also used to make sure there are no dark areas or shadows.

The ward layout is more open and spacious with fewer beds than other wards to make it easier for patients to find their way around and orientate themselves. Patients are able to “walk about and feel free to move about from bay to bay” and so feel “much more engaged in what is happening” on the ward. The importance of improving the physical environment in these ways is recognised in Tadd *et al* (2011), where it is recommended as a means of providing dignified care for people with dementia.

Implementation

Although the environment on ward D22 is generally seen in a very positive light, it was noted that some minor aspects have not worked as well as they could have, such as the toilet in the female bay not being as visible as desired. It was also observed that although the ward had been designed to provide an equal number of beds for male and female patients (10 each), this did not match the PPS findings reported in Section 2.1 which showed that there were 50% more females than males in the in-patient population. Although ward D22 has not had a problem filling its beds since it opened, it indicates that any hospital wishing to undertake a similar project should understand its in-patient profile to make sure the service it offers is designed with its potential service users in mind.

2.2.7 The integrated dementia pathway

The integrated dementia care pathway will ensure that patients with dementia and their families receive a quality service that meets their needs and follows the same principles as the other elements of the suite of interventions. This should mean that avoidable admissions are minimised; patients with dementia or possible dementia are identified; bed moves within the hospital are minimised; and participants are discharged to the place most appropriate to meet their needs in a timely manner.

A set of Admission and Exclusion criteria for ward D22 were devised as shown in *Table 2*, and are reviewed at 6-monthly intervals. It is expected that the patients will be admitted primarily from Accident & Emergency and EAU/Medical Assessment Unit (MAU). Transfer of patients from other wards will primarily be facilitated by the Dementia Outreach Team.

Table 2: Admission and exclusion criteria for ward D22

Admission criteria	Exclusion criteria
Delirium complicating dementia	Significant physical illness requiring specialist medical or surgical care
Dementia complicated by simple infection	Dementia patients waiting for social care package as transfer from other wards
Dementia complicated by falls	Delayed discharges as transfer from other wards
Patients requiring hospital care due to physical illness from nursing & residential homes	When care can be given equally or more appropriately on an ordinary medical ward
Post operative patients with dementia with rehabilitation potential	Delirium tremens
Behaviours that challenge in dementia	Where admission to old age psychiatry ward (Penn Hospital) is more appropriate
Terminal care for patients with dementia and specialist needs	

Vulnerable adults with dementia and complicated capacity issues	
Feeding and hydration problems in dementia	

In general, the discharge process:

- Focuses on the outcomes for the patients with dementia;
- Is timely and appropriate for patients with dementia;
- Aims to get patients back to their usual place of residence where possible;
- Avoids discharging patients to a temporary residence;
- Makes sure that all parties involved are aware of and agree with the discharge decisions, and that necessary support/care packages have been put in place;
- Makes sure that discharge information is available to all relevant people and services;
- Provides patients and carers with information about who they can contact with any problems or issues following discharge.

Implementation

At present the discharge element of the suite of interventions has not been finalised, as D22 is piloting an electronic discharge process. One of the main features of this process is that instead of sending discharge letters to GPs in the post or via patients or family, the electronic system will automatically send the discharge information direct to the GP. Having the admission and discharge criteria and processes defined and in place prior to the specialist ward being opened is recommended for any Trust wishing to adopt a similar model.

2.2.8 Organisational leadership and commitment to implementing excellence in dementia

One of the key elements of the project which underpins all of the other interventions was the need for the Chief Executive and key individuals within New Cross Hospital to be engaged and committed to making the delivery of high quality care for patients with dementia a priority. Implementing a project of this nature requires a culture change across the whole Trust, so leadership from the top level down is essential in order to keep the process moving and on track. Support and engagement from the Trust was seen as important, and it was recognised that *“the executive team have been very supportive of this project”* with the Chief Executive taking an active interest in the project from the beginning.

As well as leadership, the implementation of such a project requires commitment from people across a range of disciplines within the Trust including:

- Estates – to ensure that the ward environment is dementia-friendly;
- Catering – to have the flexibility to provide appropriate food and drink to patients when it is required, not just at set meal times;
- IT/informatics – to develop and implement a computerised flagging system to identify patients with dementia as the first step is to know where the patients are within the

hospital. In addition, capturing data against a range of outcome measures will enable progress and change to be monitored.

It should be noted that getting input from a wider range of disciplines adds to the complexity of project planning, both in terms of the time and effort required. While this should not be underestimated, it is outweighed by the benefits of the additional knowledge and expertise gained by involving the different disciplines in the project from an early stage.

One of the positive aspects of involving a wider range of disciplines was the culture change resulting from the increase in dementia awareness. This was particularly seen with Estates, who became fully involved in understanding the concepts behind the design of the new specialist ward. This knowledge has since been used to influence design elements in other wards and other areas of the hospital – especially those where patients with dementia may be treated – to make them more dementia-friendly.

Wider support and engagement outside the Trust was also important for the project planning and implementation, with representatives from the SHA, Local Authority and PCT being involved at different levels in spite of difficulties resulting from organisational changes taking place at a national level.

Implementation

At New Cross Hospital, a project plan was developed and systems were established to implement strategic and operational culture change management. A project manager was employed to oversee the project, and an overarching Steering Group was put in place to ensure that the whole system was working together to improve care. As shown in *Figure 3*, the work was structured under a number of work streams which are overseen by different groups who have their own regular meetings in order to monitor progress and address any issues that arise.

Having a well-defined project structure such as the one shown in *Figure 3* with different groups responsible for different elements of the implementation was recognised as being a very important part of the project. *Figure 3* also illustrates the support and engagement from different groups and individuals at all levels both within and outside the Trust.

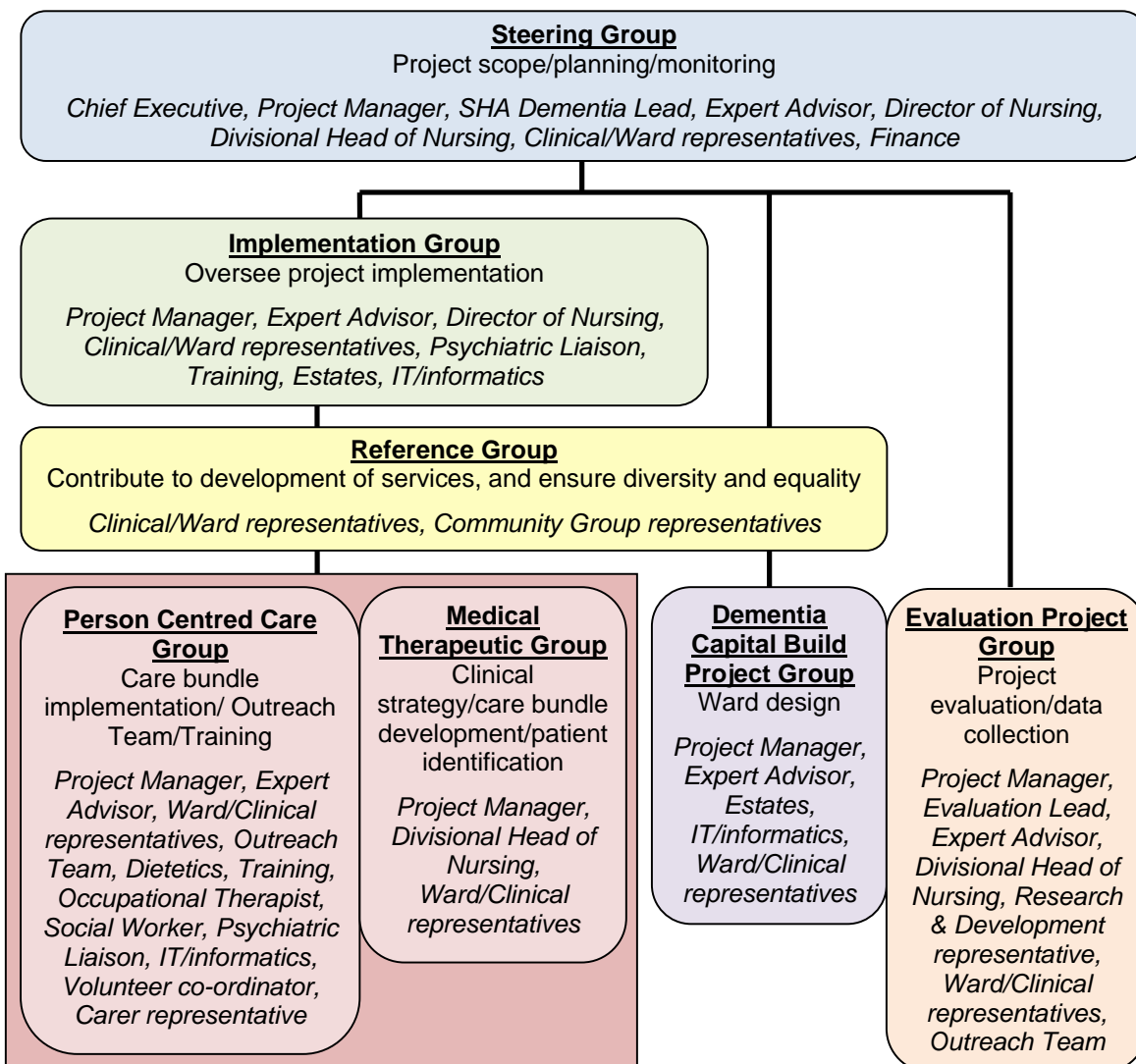


Figure 3: Project structure

One of the difficulties encountered during the project implementation was that the IT department were not allocated any additional funds or staff to support the development of IT systems to flag dementia patients and capture relevant metrics and information about them. It instead relied on the enthusiasm, efficiency and goodwill of individual members of the IT department to take the project forward from this direction. The importance of the information provided by the IT system should not be underrated, and a dedicated budget for IT support would be recommended for other Trusts wishing to follow the New Cross Hospital model.

3 The impact of the suite of interventions on patients and their families

3.1 Improved patient outcomes

3.1.1 Reduction in bed/ward moves

Moving between hospital wards can be confusing and distressing for patients with dementia, so minimising the number of moves can improve quality of care. Since February 2011 the mean number of ward moves for patients on ward D22 has been steadily reducing, indicating that following an initial adjustment phase, patients are coming more directly to ward D22. The Outreach Team has also had an impact, as they are supporting staff to care for dementia patients on existing wards rather than moving patients to ward D22. It was also noted that during bed planning meetings there was generally more recognition amongst staff that moving patients with dementia should be avoided or minimised where possible.

3.1.2 Chest infections and urinary infections under control

Since December 2010 the percentage of patients with nosocomial (hospital acquired) chest/pneumonia infections on ward D22 has generally been falling, with the results for more recent months being a lot closer to the results for the hospital as a whole. This indicates that overall D22 appears to have nosocomial chest infections under control. Similar results were seen for hospital acquired urinary infections.

3.1.3 Maintaining weight and low numbers of catheters

Since weekly data collection started in June 2011 at least 50% of patients on D22 have either gained weight or stayed the same weight for all but one week. In addition, only one or two patients per week had a catheter inserted while they were on ward D22, and results are consistently very low.

3.1.4 Few falls and improved mobility

The number of patients with dementia experiencing a fall on ward D22 has consistently been low, indeed lower than hospital as a whole, and no patients have experienced multiple falls since ward D22 opened. 78% of falls on D22 did not result in injury (76% for the hospital as a whole), so falls do not appear to be an issue for the ward. Reducing falls is important because apart from potentially causing an injury which could result in a patient spending longer in hospital, falls can affect the confidence of a patient with dementia.

Due to the high-risk patient group on D22, it is unlikely that falls can be completely eliminated. By providing patients with the space to walk around on D22 and encouraging them to orientate themselves and make use of the different areas such as the day rooms and the garden, it could be anticipated that there would actually be more falls, as patients are more active. However, if

patients are kept mobile on a daily basis, they will probably be less likely to have issues with walking than a patient who has not been mobile for a few days. In fact, since data collection began in July 2011, the mobility of at least 50% of the patients on ward D22 has improved or stayed the same each week.

The care bundle approach also means that staff have more time to spend with patients when they are walking, so they are less likely to fall. Similarly, if staff are more aware of patients' needs – such as needing the toilet – patients will not reach a point where they feel there is no-one around to help and so try to walk to the toilet when they are potentially not capable of doing so.

3.1.5 More patients going home

Since ward D22 opened, the general trend has been for an increasing percentage of its patients to be discharged back to their usual place of residence, so any extra days spent in hospital could be outweighed by the benefit of this. Additionally, of the patients seen by the Outreach Team on other wards, over 50% are discharged to their previous address, indicating that they also potentially have more positive outcomes as admission to a care home may have been delayed. These trends go against the expected outcomes for people with dementia, who are more likely to be discharged to a nursing care home (Draper, 2011).

3.2 Patient and family satisfaction with the quality of care

3.2.1 Appreciation of care provided on D22

Patients and carers rated ward D22 highly against National Audit of Dementia criteria relating to personal care and nutrition, giving a very positive view of the care provided on the ward. Entries in the visitor's book on ward D22 and the 'Thank You' cards received by the ward commented on the high quality of the care provided to the patients. Many entries also conveyed that patients and families were grateful for the level of care provided, while others made the point of the care being dignified. The importance of dignified care cannot be overstated, as recognised by Tadd *et al* (2011) who link lack of dignity with higher numbers of complaints.

3.2.2 Positive impact of care on patient and carer well-being

In addition to good levels of patient care, patients and carers commented on the beneficial impact that the care had on patient well-being in general. In recognition of the person centred care being provided on D22, it has subsequently been shortlisted for a 'Patient Experience Network' award. As well as patient well-being, comments were made regarding the support given to families, which was seen as an important part of the overall care on D22.

3.2.3 Appreciation of skilled staff on ward D22

Comments from patients and carers presented a very positive view of ward D22 in terms of the staff and the overall atmosphere on the ward. Many comments and cards were addressed to "all" the staff on D22 or included "everyone", indicating that the staff were seen as a team. The passion shown by the staff was also felt to make patients and their families feel valued.

In terms of the ward atmosphere, one comment said that *“there is a real sense of happiness and contentment as one enters the ward.”* Additional comments said that D22 was a *“wonderfully run ward”* and *“without this ward we would not have had the peace of mind whilst she has been in hospital.”* Several comments recognised the importance of ward D22 within the hospital and beyond, saw its potential for the future of dementia care, and thought that the ward should be sustained.

3.2.4 Positive opinions of the day rooms on D22

One of the key features of ward D22 which was seen as having a big impact on patient well-being and stimulation were the day rooms, of which there is one for the female patients and one for the male patients. The day rooms are used for a range of activities which provide both physical and mental stimulation for patients and consequently have been seen to make some patients *“much calmer”*. They are also beneficial at meal times, as patients are able to *“sit around a table to eat their meals,”* and something so simple can make a big difference for some patients with dementia. Overall, the day rooms have been considered to be *“a real benefit”* with one of the key personnel involved in the project stating that *“if any other hospital is going to use this model [...] they must have a day room.”*

3.2.5 Positive opinions of the garden on D22

Ward D22 also has its own small garden area which was completed in March 2011. This was felt to be an important element of the ward environment as it encourages patients to remain mobile, and enables them to get involved with different activities relating to the garden such as creating artwork, planting seeds, painting pots and watering plants.

3.2.6 Positive opinions of the relative’s room on D22

A further element of the design of ward D22 was the inclusion of a room where relatives could stay overnight if they wished. The Senior Ward Sister recognised that it had not been used as much as anticipated, but through the Dementia Outreach Team having contact with patients on other wards it was actually being used occasionally by their relatives, indicating that it was still a much needed and appreciated resource.

3.2.7 Satisfaction with the Outreach Team

The service provided by the Dementia Outreach Team is consistently rated highly by patients and carers, and is considered to have enhanced the experience of being in hospital. The Outreach Team provides important support for relatives, and is a valuable element of the suite of interventions in terms of improving care for patients with dementia and their families.

3.2.8 Better communication

An important part of the dementia care pathway for both patients and carers is having good communication with staff and having access to the right information at the right time, as this can reduce anxiety and improve the feeling of having more control of the overall experience.

A key part of this is the 'About Me' document as it provides information about patients to help staff know *"what they've been like, and what they're used to, and what they do."* This improves communication as it helps staff to realise what is important to patients and encourages them to pay attention even to seemingly minor details as *"it's the simple things that make a difference isn't it?"* This helps to make patients and their families feel like a valued and respected part of the care process, with their views and preferences being taken into account rather than being ignored.

Based on National Audit of Dementia criteria, both patients and carers on D22 were generally quite positive about the information provided to them and the communication with staff. This was the case both before and after the suite of interventions was implemented.

By improving communication staff get to know the patients more closely, are more likely to be able to identify signs of pain, distress, discomfort etc., and can resolve any potential issues before they escalate. The main area where improved communication had an impact was on the number of incidents or episodes of agitation or aggression, as overall it was felt that now *"patients are more orientated or have their fundamental care needs met, that quietens down their behaviour."*

3.2.9 Low use of anti-psychotic medication

Another consequence of improved communication and understanding between staff and patients has been a reduction in the number of patients on anti-psychotic medication. Between mid-June and the end of October 2011 on D22 there have never been more than three patients on anti-psychotic medication in the same week. This figure is in fact generally lower which is extremely encouraging, especially as it might be expected that the particular patient cohort may actually be more likely to be on anti-psychotic medication.

3.2.10 Reduction in complaints

Since opening, D22 has not had any dementia-related complaints, and there have been fewer complaints in total across D22, D5 and D8. Based on the mean number of complaints per month, this reduction in complaints equates to a saving of over £4,200³ per year for the three wards, nearly £1,400 of which relates to patients with dementia. However, the RWH NHS Trust estimates that in terms of staff time a single complaint actually costs £6,000. For ward D22 alone, the direct cost saving to the Trust per year is £15,600 when compared to the mean number of complaints received across 33 wards. Further detail on this can be found in Volume 2 of this report.

³ Based on an average of £640 per complaint (NAO, 2008)

4 The impact of the suite of interventions on staff

4.1 Staff on ward D22

4.1.1 Improved knowledge and understanding of dementia

The Dementia Training Programme has had a positive impact on staff knowledge, with changes being seen in staff understanding and attitudes towards dementia, and consequently in their confidence levels. There is also a real enthusiasm for the dementia training, and staff have a real interest in developing their dementia skills and knowledge both for their own benefit and for the benefit of the patients.

As well as a change in attitudes towards training, changes in care culture towards people with dementia have also been noticed. Based on National Audit of Dementia criteria, there has been improvement in nutrition on D22, suggesting that by focusing on the nutritional needs of the patients through the care bundle it has become a priority for staff at the same time as becoming part of their everyday practice.

In addition to the expected impact on staff on the specialist ward D22, the project has had a positive impact on staff attitudes on other wards. This is largely due to the work being done on the Dementia Training Programme and by the Dementia Outreach Team.

4.1.2 Higher staff satisfaction

While staff on ward D22 find their jobs less stressful than staff on D8 and D5, stress for staff on ward D8 has also reduced since the project began. This is likely to be linked to the work of the Outreach Team, which has had more input on D8 than on D5 to date. Staff on ward D22 generally have a higher level of job satisfaction and a more positive opinion of the different aspects of their work than staff on the other two wards. However, staff on all three wards were least satisfied with the financial and personal rewards associated with their jobs as pay and opportunities for promotion were not highly regarded.

4.1.3 Low staff sickness

Related to job satisfaction are staff absence and sickness, and sickness on D22 is very low, requiring less cover by bank staff than absence on D8. It should also be noted that during the first year of operation there has been no staff turnover on ward D22. When compared to the overall Trust level of sickness absence and the median ward absence⁴, the low sickness on ward D22 equates to a direct cost saving to the Trust between £11,700 and £21,700 per year.

⁴ D22 sickness absence in 10 months to February 2010 was 2.8%. The overall Trust level is 4.8% and the median level across 21 medical and surgical wards between May 2011 and February 2012 was 6.5%. Average bank staff costs were £9.88 on D22 in December 2011 and January 2012.

4.1.4 Improved relationships with other staff

As well as being a dementia-friendly ward for patients, D22 is also considered to provide a “positive working environment” for the staff. Within the ward “people are working together” and there is more of a “team approach.” Staff morale and attitudes towards care have seen an important shift, and it was noted that there had been “a definite culture change” at all levels. One of the important factors influencing this change among the staff is reflected in the way that “you can see the pride that they feel in their ward.”

It is also felt that there are passionate leads at all levels of the project, not just those working on ward D22. This has created a culture of support, and an acknowledgement that the staff and volunteers are doing something special and are valued by their leaders and managers.

On a wider scale, outside of ward D22 there has also been an improvement in working relationships, primarily with the Emergency Assessment Unit, which has also been working closely with the Dementia Outreach Team.

4.1.5 Improved relationships with patients and their families

One of the factors that has resulted in improved relationships with families, as well as with the patients, was having a small nurse station in each bay rather than having a large central nurses’ station. By being in the bays the nurses get to know the patients and their relatives really well, and this improved communication can result in better patient care, fewer incidents and complaints, and less stress for staff. Having a good relationship with families can also make difficult aspects of the job easier for staff. For example, ward D22 has had a number of end of life patients, but the way in which the deaths have been handled has actually improved relationships with the families.

4.1.6 The positive impact of volunteers

The dedicated group of volunteers has received training to make sure that they understand dementia and the care bundle approach, which means that they help with a wide range of tasks that support the work being done by the staff on ward D22. One key area where the volunteers are having a positive impact is nutrition, and some volunteers have had specific training to enable them to assist with feeding patients at meal times.

In addition to the core set of volunteers, D22 has a group of art volunteers that visit every two weeks. The arts and crafts activities – as with other activities that volunteers participate in – are seen as being very important for the patients, but it is felt that there needs to be “some purpose to the art” which helps to orientate the patients.

4.2 Staff across the wider hospital

4.2.1 The impact of the Dementia Training Programme

From the information contained in the training pyramid shown earlier in *Figure 2*, it can be seen that the Dementia Training Programme has had a significant and wide reaching impact on staff across the hospital as a whole. By including dementia in the Trust induction courses it was

hoped to “*catch staff before they even set foot on the wards,*” helping to effect a culture change within the hospital by raising the status of dementia and making it more of a priority for staff.

As of November 2011, over 1500 staff across all levels had participated in a dementia-related training course, and although it is recognised that some staff will have taken more than one course this figure represents more than 30% of the estimated 5000 staff working at New Cross Hospital. There has also been improvement in almost every area relating to training and support in the National Audit of Dementia.

On D22 alone, this broad approach has meant that staff including the Registered General Nurses, Health Care Assistants, Occupational therapists, volunteers and the ward hostess have all been involved in some form of training such as dementia awareness, training about the care bundle and training sessions about craft activities. However, it was recognised that having the training completed prior to the ward opening would have been preferable.

In addition to classroom-based courses, the dedicated Dementia Trainer works with staff on the ward. Having a presence on the ward was seen as being important for the Dementia Trainer as it means that they can get direct feedback from staff and identify any knowledge and training required, as well as provide follow-up one-to-one practical support for staff. This helps staff to see courses as more than just a ‘one-off’ and to carry their new skills through into practice. The importance of including practical elements in training was also picked up on in feedback from course participants, together with the need for input from family members and carers to gain an insight into their perspectives on dementia care.

4.2.2 The impact of the Outreach Team

The Outreach Team aims to avoid bed moves where possible as they can be disorientating and confusing for patients with dementia. Only around 30% of referrals are transferred to ward D22, and the Outreach Team helps to build relationships with those patients and their families before they are transferred. The majority of the work done by the Outreach Team is therefore on other wards, but it is based on D22 which allows them to maintain close links with the ward. The Outreach Team has also built good working relationships with a variety of different services, making patient care more effective and efficient.

The Outreach Team has a high number of referrals every month, with an approximate 50/50 split between reactive referrals (i.e. those referred to the service) and proactive referrals (i.e. those where the Outreach Team has gone out and identified dementia patients). The high number of referrals indicates the awareness of the Outreach Team amongst staff on other wards, as well as the need and demand for such a service within the hospital. This shows the importance of the role that the Outreach Team has in terms of promoting dementia awareness and improving quality of care for patients with dementia in the wider hospital.

In spite of the high volume of work, the relatively small Outreach Team manage to see over 63% of their referrals on the same day as the referral is made, and approximately 84-94% of referrals within two working days. This rapid response can be important in terms of providing support and a point of contact for patients, family members and staff, as well as helping to identify and address potential issues in a more timely fashion.

5 The impact at the organisational level

5.1 Leadership and culture change

5.1.1 Improved leadership at an organisational and a ward level

Implementing the suite of interventions has required a culture change to take place within New Cross Hospital, and the key to this has been the support by management at different levels within the Trust. The Chief Executive was on board with the project from the start and took an active interest by chairing the project Steering Group. The Director Lead was also an active part of the project, with further Director-level input on the Steering Group. The leadership was a significant part of the project, not just in terms of support, but also in terms of enabling changes to happen within the Trust.

Based on the standards in the National Audit of Dementia, there has been a measurable improvement at both an organisational and ward level since the start of the project, although there is still room for further improvement. At an organisational level 70% of all standards were met, compared with 50% in 2010. Ward D22 meets 96% of all standards, while D8 and D5 meet 77% and 58% respectively.

5.1.2 The importance of wider involvement and support

In addition to support within the Trust, the project was supported at both a Director level and a clinical level by the West Midlands SHA, providing important strategic direction and engagement at meetings. Director-level input was also provided from the Local Authority and the PCT. Unfortunately, national changes to the NHS affected the continuity of the engagement from the PCT perspective, and organisational changes at the Local Authority as a result of the national economic situation meant that there were changes in personnel and maintaining a presence at meetings became difficult. In spite of these difficulties, the importance of the engagement from the different groups was recognised across the project.

5.1.3 The importance of working with different services

From the start of the project dedicated Social Work time was allocated to supporting ward D22, with Social Workers attending multi-disciplinary team meetings and becoming more involved in the patient journey and the care planning process. Despite this additional connection, some of the difficulties and frustrations encountered by ward D22 during its first year were related to a lack of responsiveness from other parts of the health and social care system as it was felt that *“for the first 5 months we haven’t had the support outside.”* Part of the problem was that different groups did not necessarily understand each other’s role, and there were misconceptions about the ward. This highlights the importance of good working relationships and having good lines of communication, not just within a team but also between teams.

Based on National Audit of Dementia criteria, there has been good progress regarding working with other services, and access to different services has improved. Developing and maintaining strong working relationships with a wider range of groups is an area where further improvements could be made which would be beneficial for both professionals and patients.

5.1.4 The impact of improved leadership and improved working relationships

The implementation of the suite of interventions has resulted in a significant step being taken towards realising the ideal patient flow through the care pathway, due to the level of improved awareness and support, and better working between services. The improved dementia care pathway at New Cross Hospital is only one part of a longer dementia journey for patients. It is however *“a very important part of the journey,”* and the work being done through the suite of interventions is therefore significant and important in terms of helping to *“support patients to make sure that experience in hospitals is as good as possible.”*

It was recognised that in comparison to the wider community, New Cross Hospital and ward D22 in particular can only address the needs of a relatively small group of people. The community therefore has an important part to play in dementia care, as it can help to prevent hospital admissions. In both the community and the hospital, milder dementia is not picked up as effectively, and while this may not currently be a major issue in the acute hospital setting, early identification of such patients could focus support in community and primary care services, and also help prevent readmissions.

Support in the community could also help to minimise the impact of being admitted to hospital, improve the discharge process and improve the care available for patients following discharge. It was felt that *“the Local Authority should sign on for such projects”* and dementia awareness in the community needed to be greater, as people with dementia *“really need to be part of the society and the society needs to be more, made more aware.”*

5.2 The physical environment

Although ward D22 has been the focus for a lot of work, improvements have been made with regards to the ward environment across wards D8 and D5 as well, and all three wards now comply with the majority of the National Audit of Dementia standards to make them more dementia-friendly. In recognition of the work done regarding the ward environment on D22, it has been shortlisted for a ‘Patient Experience Network’ award. The improvements outside D22 reflect the point made previously in Section 2 that Estates have been particularly good at using their new dementia understanding to influence design elements in other wards and other areas of the hospital to make them more dementia-friendly.

As part of the King’s Fund ‘Enhancing the Healing Environment’ Programme, many of the dementia-friendly design features present on ward D22 have been extended to the Emergency Assessment Unit (EAU), such as colour schemes, space, signage and making bed areas more individualised. The Health Service Journal has also written a piece *“about the healing environment and they looked at the EAU area and our garden”* indicating the wider recognition of the work being done at New Cross Hospital.

6 The impact on the health and social care economy

6.1 Cost benefit analysis

Where possible, this report has given indications of the financial impact of various outcomes of the project such as the reduction in complaints and the low levels of staff sickness. However, despite repeated efforts during the course of the project evaluation, a full assessment of the cost benefit of the implementation of the suite of interventions was not possible as a number of difficulties were encountered. The three main issues were:

1. Identification of patients with dementia – Prior to the project, patients with a dementia diagnosis were not always coded accordingly on the Patient Administration System (PAS), making it difficult to identify them for inclusion in any subsequent analysis or comparisons;
2. Availability of data – A number of metrics which would have been useful for cost benefit analysis were not captured by the PAS or were not readily available in a suitable format;
3. Staff capacity – Due to existing work levels and other priorities, staff in the IT department were not always able to provide data in a timely fashion. As mentioned in Section 2.2.8, there were no additional funds or staff available to support any work required as part of the evaluation, so data extraction for the cost benefit work largely relied on the goodwill of the IT staff.

As a result of the efforts to access relevant information for this evaluation a suitable coding system and IT/analysis system are now largely in place, which will improve the availability of appropriate data in the future. As these systems were not in place at the start of the evaluation, the amount of data available for analysis was limited.

6.2 Closer working across services

Although it is not possible to put a figure on the cost benefit of services and systems working together more closely and more effectively, there will be an impact on the health and social care economy. Within the project there were a number of areas where closer working took place, including:

- Project planning involved senior managers from the PCT and the Local Authority;
- A Joint Strategy Group led by the PCT and the Local Authority actively involved New Cross Hospital and the project in particular when developing the wider care pathway for people with dementia;
- Dedicated Social Work time was allocated to ward D22;
- Joint training courses were carried out which were made available to both hospital and PCT staff.

6.3 Ward costs and spending

Assessing the cost of running ward D22 is difficult as there are many factors to take into consideration and there is no similar ward to compare it to. For example, it has fewer beds than other wards, a different mix of patients with different medical requirements, and higher staffing levels, all of which will have an impact on spending and costs.

As expected, the spending on staffing was more for D22 than for D8 due to its higher staffing levels, but the cost of using bank nurses, especially unqualified nurses, was almost twice as much on D8. This reflects the low staff absence levels on D22 seen previously in Section 4. The spending on 'disposables' and drugs was lower on D22 than on D8, reflecting some of the positive patient outcomes seen previously in Section 3, although D22 has fewer beds than D8. Overall, the total spending on both wards was very similar, but the cost per bed per month was higher on ward D22 (£5,249) than on ward D8 (£3,683).

6.4 Issues regarding discharge and length of stay

One of the main challenges encountered throughout the implementation of the suite of interventions involved length of stay and discharge from hospital. Length of stay did not reduce as expected, and the average length of stay on D22 was approximately 10-15 days longer than for dementia patients across the hospital as a whole at around 20-30 days per patient. This is not surprising as difficulties with the discharge process, combined with potentially more complex patients, are likely to have the knock-on effect of patients remaining in hospital for longer.

However, as seen in Section 3 more patients on ward D22 are returning to their own home or to their usual place of residence, so the longer stays in hospital could potentially delay admission to a care home or to a place where higher levels of care are required. In cost-benefit terms, avoidance or deferral of permanent admission to a care home benefits both the individual and the local health and social care economy. There will be no financial gain to New Cross Hospital itself, since although some of the longer stays attract payments under the 'excess bed days' tariff, this will not fully recover the Trust's additional costs.

However, if care home admission is avoided or deferred for a substantial time the financial savings to the Local Authority will outweigh the additional bed day costs to the Trust. For example, if a patient spends an additional 5 days in hospital a cost benefit will be seen if admission to a care home costing £540 per week can be delayed by just 3 weeks⁵. Conversely, deferring admission to a similarly priced care home for 3 months would save over £7,000 per patient.

The potential exists to reduce costs at the hospital level as well. There is substantial potential for reduced length of stay, and this needs to focus on expediting the return home of patients who previously were being discharged directly to care homes. Delays seem to be particularly related to the time to undertake assessment and care planning, which often only begins once the patient has been declared medically fit for discharge. There may also be scope for greater support to care homes to allow earlier discharge, and perhaps avoid admission altogether.

⁵ Further detailed information regarding potential savings can be found in Volume 2 of this report.

Two of the main health and social care issues surrounding discharge were identified as complex discharge needs such as co-morbidities and complex social issues, and the lack of suitable placements outside hospital, especially for patients who are under 65 and those displaying aggressive behaviours. It was recognised that there are a *“lot of challenges with discharge planning”* and not having a definite discharge process in place has made the situation more complicated, but it was also felt that it is actually *“a problem in the system, not just dementia.”*

D22 is actively trying to address discharge issues by having a member of staff dedicate one day a week to a discharge co-ordination role, but it was noted that in some cases discharge cannot and should not be rushed as *“taking an extra day or two days to make sure everything is right could make the difference”* between a patient returning home or going into a care home. The difficulty in trying to achieve a balance between improved patient outcomes and length of stay should not be underestimated.

Overall, it may be too early to see the expected reduction in length of stay for patients with dementia as the different elements of the suite of interventions have come into operation at different points during the past year. It may actually require a prolonged period of stability with all of the interventions in place to get a true reflection of the situation and the impact of the suite of interventions as a whole. However, it should be noted that if length of stay can be reduced in the future by an average of just one day per patient with dementia across the hospital, the direct gain to the Trust could be over £300,000⁶.

⁶ As seen in Section 2.1.1, there were 1591 in-patient cases of dementia in 2010-2011. Assuming a cost to the Trust of £200 per day this would result in a saving of £318,200.

7 Conclusions

7.1 Key findings from the project

There is little evidence of interventions for patients with dementia in acute hospitals, and this project was innovative in its concept and approach.

At New Cross Hospital there is a prevalence of dementia within the in-patient population of 11%-19%, although up to 50% of these will not have a formal diagnosis. Patients with dementia are generally very poorly, quite frail and often approaching the end of life, however, levels of acuity, in the sense of requiring services only an acute hospital can provide, are relatively low.

New Cross Hospital has made significant progress towards becoming a dementia-friendly hospital in line with the National Audit of Dementia recommendations. Improvements have been seen in a number of areas including:

- Providing information to patients and their families
- Personal care and nutrition on the specialist ward
- Staff training and support
- Organisation at a hospital level and at a ward level
- Access to services
- The ward environment on three key wards for patients with dementia

Through implementing the suite of interventions, New Cross Hospital has also taken a significant step towards the ideal care pathway proposed for patients with dementia.

Key factors in the success of the project have been the leadership at all levels from the Chief Executive down, the project planning and management, the work done by the Outreach Team, and the broad approach taken by the Dementia Training Programme.

Appropriate cost benefit data was difficult to access, but work carried out during the evaluation has resulted in systems being put in place to make future analysis easier.

7.2 The impact of the suite of interventions

7.2.1 The impact on patients and their families

Care for people with dementia is delivered in a more personalised manner:

- People with dementia are more readily identified within the hospital due to an improved flagging system, which is a key step towards being able to meet individual care needs;
- The suite of interventions, in particular the care bundle approach and the 'About Me' document, have improved the provision and quality of dementia care and care planning

on the specialist ward, on other wards and across the wider hospital at an organisational level;

- Relationships and communication between staff, patients and their families have improved as they feel like a valued and respected part of the care process;
- The environment on ward D22 enables patients to be more orientated, and the wider hospital environment has become more dementia-friendly.

The implementation of the suite of interventions has had a positive impact on patient outcomes on ward D22:

- Patients are subjected to fewer moves between wards, reducing potential confusion and distress;
- Hospital acquired chest/pneumonia infections and urinary infections appear to be under control;
- Patients are less likely to lose weight due to improved nutrition and hydration;
- Patients are encouraged to remain mobile, yet there have been a low number of falls;
- No patients have experienced multiple falls;
- An increasing number of patients are returning to their own homes.

Patient and carer satisfaction has improved, with positive views expressed regarding the care provided on ward D22:

- The high level of care has had a positive impact on both patient and family well-being;
- Ward D22 is seen by carers and families as being an achievement for the hospital, and its benefits should be shared more widely at a national level;
- Since opening in November 2010 ward D22 has not received any dementia-related complaints.

Patients and carers also hold the Dementia Outreach Team in high regard, and see it as providing a valuable service and support.

7.2.2 The impact on staff

The project has had a positive impact on staff at New Cross Hospital, especially those working on the new specialist ward D22.

Staff are more skilled and confident, and use a team-based approach to dementia care:

- Staff knowledge and understanding of dementia has improved on ward D22 and across New Cross Hospital as a whole;
- The Dementia Training Programme has played a significant role in raising awareness and understanding of dementia by making it a priority for staff. The courses it offers can make a real difference to staff practice and patient care;
- The Outreach Team has a key role in improving dementia awareness and quality of care for people with dementia in the wider hospital environment. Around 50% of its referrals are reactive and approximately 70% of patients are treated on wards other than D22;

- The trained and dedicated volunteers are an essential part of the dementia team.

Staff satisfaction has improved, especially on ward D22:

- Staff on D22 have expressed that they have less stressful jobs, a higher level of job satisfaction, and a more positive opinion of their work than staff on D5 and D8;
- Staff and volunteers on D22 feel valued, as a culture of support has been developed and there is an acknowledgement that they are doing something special.

7.2.3 The impact at an organisational level

Management at all levels was committed to improving dementia care in the acute setting:

- Engagement from the Chief Executive and at the Director level was key to the successful implementation of the project.

The project has been beneficial to the organisation as a whole:

- There has been a culture change due to the heightened awareness and understanding of dementia among staff at all levels;
- The team is building stronger relationships with services both within and outside the hospital, such as the dedicated Social Work time on D22, and there is a better awareness and understanding of each others' roles;
- Engaging support services has encouraged them to take a more flexible and broader approach, applying their new knowledge of dementia across the wider hospital.

Work to improve the physical environment for patients with dementia has had an impact not just on ward D22 but across the wider hospital:

- Wards D5 and D8 are now more dementia-friendly, indicating that they can provide a more suitable environment for patients with dementia;
- EAU has successfully been redesigned using funding from the King's Fund 'Enhancing the Healing Environment' Programme;
- The work that has been done to improve the physical environment for patients with dementia at New Cross Hospital has been recognised locally and nationally.

7.2.4 The impact on the health and social care economy

The complexity of gathering cost benefit data should not be underestimated, but the systems are now in place to make data extraction easier for the future.

There have been some cost benefits for the hospital, although not to the extent that was anticipated:

- Ward D22 has seen no staff turnover and low sickness levels, reducing the need for bank staff. This has resulted in a direct cost saving of between £11,700 and £21,700 per year;
- Overall spend on D22 is comparable to that on ward D8, although the cost per bed is higher on ward D22;

- The positive impact of the suite of interventions on patient outcomes is reflected to some extent in reduced spending on D22 in areas such as drugs and 'disposables';
- The reduction in complaints has also had a positive financial impact, with D22 saving nearly £16,000 per year compared to the average number of complaints for a ward.

The wider health and social care economy has also seen a potential positive financial impact from the project:

- Delaying admission to a care home could potentially outweigh the cost of a longer hospital stay, with the savings being seen by Social Care rather than the NHS.

7.3 Further developments

Some areas require further development as they have not improved as anticipated:

- Length of stay has not reduced as expected, and is linked to issues around timely discharge for people with dementia;
- A clearer discharge process needs to be established, and discharge planning should begin sooner for individual patients.

It is potentially too soon to see a difference in length of stay due to the numerous changes that have taken place during the first year of operation. A longer period of stability may be required to get a more accurate reflection of the impact of the suite of interventions in this area.

- In the future, being able to reduce length of stay per person with dementia by a single day could result in a direct gain to the Trust of over £300,000.

7.4 Implementing the suite of interventions

7.4.1 Advice and lessons learnt

The unique care bundle is at the core of the suite of interventions but cannot be implemented in isolation:

- The suite of interventions needs to be implemented using a composite approach, where all elements support each other. Implementing the care bundle by itself will not achieve a hospital-wide change in culture and practice;
- A culture change was required within the organisation, and commitment from the top level of management down has been essential at New Cross Hospital.

A clear project structure and a clear vision of the project aims are essential, and both need to be communicated to everybody involved in the project:

- Wider engagement from different disciplines within the hospital is vital, and the project plan should ensure that relevant parties are given appropriate financial support;
- The time and effort required to plan and implement the project with engagement from relevant parties should not be underestimated.

Appropriate systems and personnel need to be in place to understand the cost benefit impact of the suite of interventions.

Working as a team and having a better understanding of the new care approach makes individuals feel more actively involved and helps them to recognise the importance of their role within the team:

- It is important to build strong relationships within the ward, within the hospital as a whole, and with groups and services in the wider community;
- More work to clarify roles and build working relationships at the start of the project would have been highly beneficial.

Using the checklist was a successful method for getting the care bundle approach engrained into the everyday way of working for staff:

- The random audit tool was an effective way of monitoring compliance with the care bundle, which can be extended to other wards;
- The 'About Me' document forms an important part of the care bundle implementation in supporting all three of the key areas, and should be completed and used by all staff as well as by the families.

Key elements should be taken into account when designing a specialist ward such as D22:

- Ward design should support the principles of the care bundle approach, with operational guidelines being adapted or rewritten as appropriate;
- The day rooms support activities and meal times, and would be an absolute must for any wards following the New Cross Hospital model;
- Having the nurses' desks in the bays is a simple but highly effective way of improving communication and patient care;
- Including a garden and a relatives' room are strongly recommended;
- The design of the specialist ward should take into account the profile of patients with dementia within the acute setting.

Volunteers are a key element of the suite of interventions and have an important part to play in supporting the staff and patients on ward D22, especially with respect to nutrition and activities:

- Dementia training for volunteers is essential to ensure that they understand dementia and the importance of the care bundle, and to improve their skills and confidence;
- Volunteers should be taken on at an appropriate point during the planning and implementation process to ensure that they remain engaged with the project.

The Dementia Trainer and the Dementia Outreach Team need to be in place before the ward opens, and ideally should be involved in the project planning process:

- Potential difficulties in recruiting the right people with the right skills should be recognised;
- Locating the Outreach Team within ward D22 enables closer working to take place;
- Dementia training should be undertaken by staff and volunteers at all levels and be completed, where possible, before the ward opens;

- Training should include practical elements to enable staff to put their new skills into practice.

Clear admission and discharge processes should be developed prior to the specialist ward being opened.

7.4.2 Monitoring, support and maintenance

The Dementia Outreach Team must be supported to develop their service in the future as it could have a significant impact on the care provided for patients with dementia across New Cross Hospital as a whole:

- The Dementia Action Network is at an early stage in its development, but should be expanded and strengthened as it provides an important network of dementia champions which can work alongside the Outreach Team to spread dementia knowledge throughout the hospital;
- The roll-out of the care bundle to wards D8 and D5 should be monitored by the Outreach Team to see if there are any issues regarding how it is applied to a general medical ward.

It is essential that the courses within the Dementia Training Programme continue to be delivered and developed over the coming years, and a strategy for taking this forward needs to be defined.

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