Staying safe - preventing falls
Introduction

The aim of High Impact Action: staying safe – preventing falls is to demonstrate a year-on-year reduction in the number of falls sustained by older people in NHS-provided care.

However, patient safety must always be carefully balanced with patient independence and their right to make informed choices.

A practical summary

Every nurse knows there is no such thing as a simple fall. Even a fall where there is no injury can cause a level of psychological damage to the patient often resulting in a loss of confidence and independence. This can lead to the need for increased or extended support from the NHS. Nurses are aware that there are things that can be done to prevent patients from falling, or at least to minimise the risk. We all have a responsibility for ensuring that we try and take the appropriate action to keep our patients safe. To do this we need to have a coordinated approach with both organisational leaders and frontline staff playing their part.

There are many elements to falls prevention and the approaches featured in these case studies are not exhaustive. These organisations recognise that falls prevention is a complex area that has many layers, which means no one method will work alone. Falls prevention needs to consider the patient’s individual needs and the different environmental factors in different settings, including home, care setting and hospitals. All of this needs to be reviewed, while balancing patient safety, independence and rehabilitation.

The problem

The National Patient Safety Agency (NPSA) reported 152,000 falls in England and Wales in acute hospitals, 26,000 in mental health trusts and 28,000 in community hospitals (2009). Many falls are avoidable but the challenge of falls is one that is likely to grow alongside an ageing and more frail population who have more complex health needs than ever before. While the Social Care Institute for Excellence (SCIE) reports that care homes have a higher prevalence of falls, there appears to be a lack of comprehensive, recent data from the UK on the number of falls in care homes and other long-term residential settings (SCIE, 2004). It is generally accepted that around 30% of people aged over 65 living in the community fall each year (Gillespie, L. et al, 2009).

Hospital inpatients and older people in either hospital settings or care homes are more at risk of falling than non-hospitalised people, due to the increased incidence of confusion, confounding medical conditions and environmental factors (Fonda et al, 2006).

The cost

The average rate of falls in 2008 was 5.4 incidents per 1,000 bed days. This equates to 30 falls per week in an 800-bed acute trust.

Associated healthcare costs are estimated at a minimum of £92,000 per year for an average acute trust with an annual healthcare cost for treating falls in England and Wales of over £15 million. The direct cost of falls by harm category has also been calculated by the NPSA and range from £41 for a no harm incident to £2,289 for a fracture (excluding hip) and £3,981 for a hip fracture incident.
There are additional costs not included in these calculations such as the health and social care required after hospital discharge and any litigation claims made by the patient against the hospital. Litigation costs for falls, if sought, have been reported as resulting in a mean payment of £12,945 (based on data gathered between 1995 and 2006) (Oliver et al, 2008). Just under two thirds of these claims made by patients (60.5%) resulted in payment.

The NPSA (2007) calculated a potential cost saving of £16,560 each year for an average 800-bed acute hospital trust associated with reducing the number of falls by 18% through multifaceted interventions. This figure does not include savings associated with a reduced need for care after discharge from hospital or reduced litigation costs.

**What we can do**

Due to the complexity and nature of falls, we know there is no single preventative measure that will work. The sort of interventions identified as having an impact include: exercise programmes, identification bracelets, alarm systems and risk assessments. The range of interventions needs to be coordinated, to respond to the individual patient’s risk and be focused across the patient’s pathway. Contextual factors – those things that will be particular to your organisation (its systems and processes) and those things particular to groups of patients – are also important to consider when starting any work. There is much to gain by preventing falls, for example by keeping patients safe, independent and mobile means that patients spend less time immobile and bedridden and this lessens the likelihood of pressure ulcers. Additionally, examining the reasons for falls can lead to wider ranging interventions, such as improved nutrition, hydration, continence, privacy and dignity.

**The case studies**

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*East Kent Hospitals University NHS Foundation Trust* introduced weighted alarm systems to alert staff when at-risk patients get out of bed or up from a chair unaided. They have tested its use alone and as part of a care bundle.

*NHS Blackpool* pre-empted falls by targeting very high intensity users and supporting them through case management provided by a community matron.

*Colchester Hospital University NHS Foundation Trust* introduced The Tiptree Box and cafe table style toolkit for staff in acute wards to provide distraction therapy for patients with dementia.

*Ipswich Hospital NHS Trust* developed a checklist observation tool of patient-centred activities across its complex care wards, designed to reduce falls in those at high risk.

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Further information available from the NHS Institute website.
Where are the best sources of information?

NPSA - Slips trips and falls in hospital guidelines
http://www.nrls.npsa.nhs.uk/resources/?entryid45=59821

NICE - http://www.nice.org.uk/CG21

Prevention of Falls Network Europe www.profane.eu.org/

Patient Safety First – the How to Guide for Reducing Harm from Falls
Campaign-news/current/Howtoguidefalls/

Article – Strategies to prevent falls and fractures in hospitals and care homes and effect of cognitive impairment: systematic review and meta-analyses: http://www.bmj.com/cgi/content/abstract/334/7584/82

Age UK (formerly Help the Aged and Age Concern):
www.ageuk.org.uk/home-and-care/adapting-your-home/ways-to-make-tasks-easier-around-the-home/?dntshw=true

Effectiveness of a Multifaceted Intervention on Falls in Nursing Home Residents (Journal of the American Geriatrics Society)
www.americangeriatrics.org

Volume 51, Issue 3, Date: March 2003, Pages: 306-313)

Clemens Becker, Martina Kron, Ulrich Lindemann,
Elisabeth Sturm, Barbara Eichner, Barbara Walter-Jung, Thorsten Nikolaus

“Innovation (especially the widespread adoption of best practice) and prevention (in the medium term through secondary prevention, and, over the longer term, through primary prevention) will be key enablers for achieving quality and productivity gains.”

The NHS Quality, Innovation, Productivity and Prevention Challenge: an introduction for clinicians
Case study: East Kent Hospitals University NHS Foundation Trust

Using a ‘falls bundle’ to reduce falls in hospital

East Kent Hospitals University NHS Foundation Trust looked at introducing weighted alarm systems, and piloted their impact against an intensive care bundle, which also incorporated staff champions, intensive support and education and regular access to specialist falls nurses. The care bundle helped to reduce falls on one ward from 18 to four over a period of three months.

Setting the scene

Most of the inpatient falls occurred on elderly care and stroke wards. The staff recognised the need to minimise the risk of falls.

The approach

The main focus of the project is to ensure that all patients over 65 are routinely assessed for risk of falling on admission to hospital, and appropriate measures taken to reduce falls both in hospital and post-discharge.

They piloted a range of different interventions as follows:

- a weighted alarm project on three wards
- a care bundle approach on two wards. This featured the weighted alarm along with the use of defined preventative care, screening tools and reporting of falls
- on a third ward, the care bundle was enhanced: the ward had a low-level bed, its own supply of hip protectors, intensive training, daily visits from specialist nurses, weekly practice audits and its own falls ‘champions’.

The team utilised every avenue of support, including working with the hospital trust’s League of Friends to fund a range of equipment.

“The biggest impact we have seen on the ward is staff taking ownership of the issues, taking responsibility for addressing them and taking responsibility for improving them.”

Naomi Dickson
Modern matron

DVD also on NHS Institute website
Printable information from the NHS Institute website
How they did it

Every nurse knows there is no such thing as a simple fall. Even a fall where there is no injury can do irreparable damage to the patient, increasing staff workload and stress.

One of the key interventions introduced by East Kent Hospitals is the sensor alarm project to alert nursing staff when a patient attempts to get up from their chair or bed. The alarms are used on patients identified as being at high risk of falls, following a risk assessment carried out on admission to hospital. Often, these are patients who don’t know they need help, or who don’t want to ask for it.

The sensor alarms were launched in April 2009, on three wards with a high incidence of falling. The hospital used two different approaches to measure the alarms’ effectiveness: the project team believed there was no single answer to the problem of falls. On two wards, the care bundle featured sensors, along with preventative care mechanisms, screening tools and reporting of falls. On the remaining ward – Bethersden Ward –, this was enhanced with other interventions, including a low level bed, a supply of hip protectors, intensive training and education and its own falls ‘champion’. On this ward, the enhanced care bundle has helped reduce the rate of falls by more than 60% within six months. This result was made possible through intensive support which would need to be maintained.

“It’s about minimising the risk, we can never take the risk away completely,” says Debbie Janaway, osteoporosis and falls lead nurse, who led the work alongside modern matron, Naomi Dickson, and fellow specialist nurse, Joy Marshall. “People in hospital are most at risk if they don’t recognise the risks to their own safety. Most of the patients we are working with have some cognitive impairment.”

Embedding the use of sensor alarms and bringing staff on board was the ultimate challenge, but it only takes one patient to change practice, as healthcare assistant, Jane Evans, explains: “Initially, I thought it was just more paperwork, just another alarm to answer; but it just took one patient. Before the project, you accepted that if someone was going to fall, there was nothing you could do to prevent it. All you can do is put on hip protectors or take other measures to reduce the impact. But then we had one patient and he definitely would have fallen many, many times [without the sensors] and that’s what convinced me the alarms worked.”

“You have to commit yourself to keep up to date, to be able to say to staff you are coming from a good knowledge base, to do the research. We have to be credible.”

Naomi Dickson
Modern matron for acute medicine
Osteoporosis and falls nurse, Joy Marshall worked intensively with the ward, providing training on the use of the alarm sensors and falls prevention strategies. “Nurses are very busy and have many things to think about. I went onto the ward every day for a month.” she says. “Staff came to associate me with falls and the alarms and it acted as a reminder. I think this was a major part of its success.”

The sensor alarms were also introduced onto a neurology ward where patients were often younger but had cognitive problems, with conditions like Parkinson’s disease and Multiple Sclerosis, which affected their mobility. Patients considered to be high risk were grouped together and the alarms were used following an assessment in the clinical decision unit. Staff balanced their use as a safety tool against other important factors such as the dignity, privacy and rights of the patient. Deputy ward manager, Claire Langham says: “It offers piece of mind for nurses.”

Addressing the flow of information was also vital in developing the falls prevention programme. An assessment of the reporting systems revealed delays in reporting which made analysis difficult; timely responses were problematic and feedback to the wards was patchy. As a result, staff felt the incident reporting forms were just more pointless paperwork, increasing the risk of under-reporting. A new online reporting system is being introduced across the trust and will provide real-time data for managers, enabling a fast response. This web-based electronic form will allow the trust to analyse and feed back information through custom-made reports, identifying risk areas and appropriate interventions.

“Falls are a multi-factorial issue. The sensor alarms are just one element; you have to understand each patient is an individual, assess their risk and consider all the interventions available.”

Debbie Janaway
Osteoporosis and falls lead nurse
Local results

Impact on quality of care
The enhanced care bundle introduced on Bethersden Ward helped to reduce the rate of falls by more than 60% within six months.

The 60% reduction achieved on Bethersden Ward has been sustained since they were introduced in April 2009, indicating that the falls prevention strategies have become embedded in the usual care provided.

Use of the alarm systems as a single intervention did not reduce the incidence of falls on the other two wards, indicating that preventing falls requires multiple solutions.

Impact on patient experience
The sensors reduced the need for ‘specials’ – staff who can sit with the most vulnerable. As well as being an added cost, ‘specials’ can be difficult to recruit and patients often regard their presence as an invasion of their privacy.

Impact on staff experience
Teaching staff takes time and support for it to become embedded, but it improves staff satisfaction.

Understanding the issues with data and reporting means that the transition to a new hospital-wide information system can be tailored so that it collects and provides the information necessary.

Impact on cost reduction
There were 117 falls in the six months prior to the project starting, costing £6,944. Of these, three resulted in fractures at a cost of £9,924 - resulting in a total cost of £16,868 for these patients.

During the six-month project, 44 falls were recorded at a cost of £2,611. One of these resulted in a fracture at a cost of £3,308 resulting in a total cost of £5,919 for that patient.

During the six months following the project there were only 14 falls which cost £831 each, none of these resulted in a fracture.

As a result of this project the trust can report a £16,037 cost reduction in comparison with the period before this work started.

Note: An NPSA 2007 study reported the average cost of no harm to moderate/severe harm falls across the NHS is £59.35 and the average cost of a fall resulting in a fracture is £3,308.
Key themes and methodology

Senior level support

Executive support is vital for the success of any improvement work.

In this case it was evident that the programme was given high priority on the wards by frontline staff, matrons, directors of nursing and the trust board. This high-level, visible support, which included regular visits to the ward by senior leaders, directly influenced the success of the falls programme.

It is a responsibility of the board to both set strategic aims for improvement and support the local clinical teams to establish and agree a set of measures that will track progress towards the shared vision. It is important that this data is shared regularly with the board, along with details of progress, and any barriers to progress that are being faced.

Improvement tip

The appointment of an executive lead ensures that a reduction in harm from falls is represented as an integral part of the trust’s improvement agenda. They can provide a voice for the project at the board, have the leverage to remove barriers to progress and ensure that falls is included in the leadership walkarounds agenda.

In the How to guide for Leadership for Safety (available at http://www.patientsafetyfirst.nhs.uk), it is suggested that there be an executive lead for each workstream relating to patient safety, that this responsibility could be included in their job plan and the work’s progress form part of their appraisal process.

Slips, trips and falls
(National Patient Safety Agency)
"Delivering high-quality care services means that local organisations should capture and understand information about their current level of quality performance and use this to make changes to improve care. Measuring quality and making comparisons with other clinical teams can drive significant improvements for patients."

The Nursing Road Map for Quality – a signposting map for nursing

"Falls are the leading cause of accidental death in people over the age of 75. In addition to suffering physical injuries, falls patients can experience psychological trauma. They can become socially isolated due to a fear of going out and this can lead to depression, anxiety and a loss of independence. Falls can be a real stigma for older people."

Lynn Sutcliffe
Falls matron
Case study: NHS Blackpool

Taking an holistic approach
Within the population of Blackpool PCT there is high number of elderly residents, and it was spending £50,000 a month in ambulance call-outs to people who had fallen. Half of these people did not need clinical treatment, more often they physically needed help to get up with some reassurance. The PCT started a piece of work to reduce the number of these falls and focused on those patients who were very high intensity users. They aimed to pre-empt and prevent falls and did this by providing support through case management led by a community matron.

Setting the scene
Blackpool is a popular retirement destination, creating a high concentration of potentially vulnerable elderly residents at risk of falls in their own homes, hotels or residential and nursing homes. Around 6% of over 75s were identified as being at high risk of unplanned hospital admissions – equating to 800 people in the PCT area. In 2006, the PCT counted 250 ambulance call-outs a month to falls in the over-65s, costing around £200 each. Only half of these resulted in any kind of treatment beyond reassurance.

The approach
The falls team identified a number of best practice approaches:

- establish what the current level of service is across health and social care services and identify any opportunities for improvement
- inform GPs so that they are aware of the plans for improvement.
- distinguish between ‘falls’ and people collapsing or fainting
- be flexible, listen to feedback and, if necessary, act on it.

The PCT began by identifying very high intensity users (VHIUs) who would receive support provided by the community matron. These were people with one or more long-term conditions who were registered with a Blackpool GP and had had two or more falls over the last 12 months. Blackpool PCT identified 350 VHIUs with a range of conditions, including heart failure, COPD, cancer, asthma and diabetes.

From the outset, the PCT worked closely with the local authority, as well as other organisations involved in the care of elderly patients.

“IT has changed my life completely. I can now live here independently. If I didn’t have this system, it would be very difficult for me to live on my own.”

Eileen Beaton
Telehealth user
How they did it

Lynn Sutcliffe was appointed as falls matron in 2006, spending half her time working as a community matron and the rest concentrating solely on falls, with 350 very high intensity users (VHIU) who had undergone frequent hospital admissions.

“The community falls team provides an holistic falls risk assessment service within the home of vulnerable adults, particularly those who, historically, have been unable or reluctant to access help. We then develop and deliver a patient-centred service that meets individual needs,” explains Lynn.

“Ultimately, our aim is to reduce the incidence of falls, thereby preventing unplanned admissions to hospital. This job is a great way to have a direct impact on older people’s health. I am passionate about it – the job description could have been written for me.”

The aim of the falls team is to work closely with VHIUs in order to reduce their chances of falling again. Lynn carries out around 10 falls visits per week and delivers training for anyone working with vulnerable elderly people, including the acute trust, social services and local council.

They work closely with a local social enterprise that provides telehealth and telecare for vulnerable people. The company received extensive training from the local ambulance service and now provides a lifting call-out service for people who have fallen. On average, they lift between 60 and 70 people every month – calls that otherwise, would go through to emergency services. The company has around 5,000 users, 3,000 of which are highly vulnerable.

“We are part of a much wider team,” says community falls case manager, Heather Hollowell, “that includes OTs, physios, chiropody, pulmonary / cardiac rehabilitation, district nurses and consultant geriatricians. I was a district nurse for six years, so I have a good understanding of the multidisciplinary team services that we can call on – that is crucial in this job.”

“At the outset, there were a number of dissenting voices, particularly among local GPs,” admits Lynn. “We got our main resistors on board by involving them in the implementation group and one, in particular, has now become a real advocate of the system.”

“It has also been important to learn as we have gone along,” says director of nursing and quality, Helen Skerritt. “Initially, our community matrons didn’t work at weekends, but analysis of hospital admissions showed that this was typically when a lot of referrals were made, so we have adapted the service to meet this demand. We have built up good relations with the local hospitals. Collaborative working is key for an approach like this to succeed.”

Another key challenge came in obtaining robust data to measure the impact of their actions. An external company carried out an audit of the PCT’s work and suggested how improvements in data collection could be made. The health informatics team now evaluates the work on an ongoing basis.

“Know your population, get the facts from the outset and make sure your staff have the right skills in place,” adds Helen. “We encourage a healthy competitive spirit between our community matrons by setting them improvement trajectories to achieve.”
“Due to Blackpool’s unique demographic, we believe it is important to have a community matron specialising in falls prevention. We have supported the falls agenda at the highest level from the outset and articulated our reasons to all of our stakeholders.”

Helen Skerritt
Director of nursing and quality
Local results

Impact on quality of care
Hospital admissions are reduced, saving money to be reinvested in healthcare. Patients feel reassured and better cared for. Lynn carries out around 10 falls visits per week, with each assessment taking between 60 and 90 minutes.

Impact on patient experience
Once assessed, between 50% and 75% of patients do not experience another fall within three months of the initial visit. Three years on from the launch, patient satisfaction surveys are glowing.

Impact on staff experience
The PCT is now recruiting a new case manager to deal with increasing referrals, staff say the approach makes them feel very valued and the service is joined-up, with the team acting as a coordinator of care provision.

Impact on cost reduction
Figures show that approximately six hospital admissions are saved every month – equating to a cost saving of around £18,000 per month for the current caseload. The latest matron analysis statistics show that 83 admissions have been deflected to date and £243,000 saved.

Return on investment calculation
Costs of the following inputs were calculated for the planning and implementation phases: dedicated time from the project lead and senior management support; development of the community matron model for falls; costs of the community matron falls team; staff training and travel costs. Impact costs were calculated in terms of fewer falls related hospital admissions each month. For every £1 spent the community matron falls programme generates £2.69 of benefits. This calculation does not take into account the additional quality benefits that have not been monetised or any of the additional levered costs through community services.

Further information available from the NHS Institute website
Key themes and methodology

Championing the cause
The falls team recognise that falls can not be prevented by a falls matron, or indeed a PCT alone. The team work closely with a range of organisations across the health and social care economy, including the acute sector, GPs and the local authority through to charities like Age Concern (now called Age UK), to identify gaps in provision. Taking a multi-organisational and multidisciplinary approach, the team was able to champion the cause with a wide group of people.

We need to start to understand the characteristics and the different ways of working required by the new system we are developing. If we are successful, the NHS in five years’ time will have more services closer to home and, therefore, less investment and activity in the acute sector. There will be much less variation, with the NHS pound increasingly spent on defined quality standards and patient pathways. Some of this will require new ways of organising services to deliver care in new ways, but we don’t have the luxury of prolonged debates.

Healthcare is complex, and working across both health and social care adds to the complexity. Anyone who works in the system will want to provide the best possible care for the user/patient, but often, the complexity means that this doesn’t actually happen. What we need to be aware of is that different parts of the system have different structures, processes and also patterns of behaviour. Working though these and understanding how the three elements interact will help if you want to make fundamental and transformational changes in a complex system to the common goal. Organisations need to work together to put patients’ interests first and manage risk across the system, rather than just within organisational boundaries.

“The local authority and PCT have always worked closely together to develop flexible and creative solutions to local issues. We share a building and have joint strategic planning groups and joint agendas. We ensure that our outputs benefit one another and we avoid duplication, wherever possible.”

Brenda Hargreaves
Head of nursing
Preventing falls
The Tiptree Box and café-style table is a toolkit for staff on acute wards to use to provide distraction therapy for patients with dementia. In an acute setting, patients with dementia often become more confused, feel displaced, have high anxiety levels and wander around the ward. The toolkit consists of familiar everyday items and a table where patients can sit safely and not be confined to their bedside.

Setting the scene
Ward sister, Carrie Tyler had been looking at how she and her team could better understand why patients feel the need to get up and wander around the ward and how to prevent the high level of falls in this group. She found that the end of the day was the highest risk time, recognising ‘sundowning behaviour’ or the regular activities that people do at the end of each day.

The approach
The Tiptree distraction tool – named after the ward it was first introduced on – consists of a café-style table with a red tablecloth, chairs, and a box of familiar items that keep patients engaged to the extent that they were less likely to wander but were happy to sit at the table in sight of the nurses’ station. The box includes food and drink to maintain energy and hydration.

The idea was presented to the Bright Ideas Competition at Health Enterprise East (HEE) in 2007 and the team won £3,000 to pilot it, as well as getting advice around Intellectual Property to protect their idea. An initial 12-week pilot was extended to a year. The team compiled tool boxes for nine areas, including elderly care, A&E, EAU, trauma and orthopaedics.

“IT was the simplicity of the idea that intrigued me. Some simple initiatives and interventions don’t come at a huge cost and yet makes such an improvement to the patient experience. It’s important to nurture ideas and to give staff encouragement.”

Julie Firth
Director of nursing and patient experience
How they did it

Entering one of the acute wards at Colchester General Hospital NHS Foundation Trust, your eye is immediately drawn to the café-style table that plays a crucial role in the falls prevention work at the hospital, focusing on patients with dementia.

“At about 5pm, you wave goodbye to a core of doctors, physiotherapists and occupational therapists, but you still have care to provide and dispense suppers and drugs and this is also the main time for discharges,” says ward sister, Carrie Tyler. “It becomes a pressure point and staff often feel their stress levels go up. The patient doesn’t feel relaxed in a bed they don’t recognise, they get agitated and become more difficult to medicate. What they need is to sit in an area where they feel safe, have a cup of tea, some jelly babies to boost their sugar level, watch the world go by, and not feel threatened and made to feel that they’re in the wrong place with the wrong people.”

Understanding this, the team at Colchester started to make connections between the practical aspects of nursing dementia patients with what had been written in several different research articles. The idea for the distraction toolkit was born from a wide variety of interesting sources, one of which dated back as far as 1942 when the team found the first reference to sundowning within an institution. The team sought out more information which could help them. A programme by the King’s Fund, Enhancing the Patient Requirement, explained red is the colour that stimulates gastric juices as it is the most naturally occurring food colour, so the team used red for the tablecloth to encourage patients to eat and drink more. “I wanted to back up what I was saying so that people were more likely to say, ‘Yes, you know what, not only does it sound sensible, but we have the evidence there to put it into practice with confidence,” adds Carrie.

“It’s about marking the end of the day, which is referred to as sundowning behaviour,” explains Carrie. “For example, sundowning might involve cashing up your shop, so we include money, a calculator, wallet, purse, and envelopes in the box. Other examples include family albums, cards and dominoes. Patients might not use all of the equipment in the box but these are tactile and familiar objects, giving them a sense of safety. This makes the patient feel less restless and more likely to stay sitting in their chair where they will be safe and comfortable and ready to drink.”

“We compiled boxes for nine areas,” continues Carrie. “We chose A&E, EAU, trauma and orthopaedics. We were going to use a medical ward, but then an oncology ward asked if they could be included. They wanted to know if it would work with people who have brain tumours, because the behaviours I was describing were similar to it. The other five areas were care of the elderly wards.”

Carrie also developed 45-minute teaching sessions and worked with 98 nurses and healthcare assistants across the care for the elderly wards. She worked with ward managers on the remaining areas. “I spent a session with the managers and they rolled it out to their staff. Initially, we thought it would take 12 weeks, but there were barriers, such as workload so we decided to do a year long trial, which ended in September 2008.”
“I must admit, I thought, is it going to work?” says acting sister, Paula Whitehead. “But it was unbelievable. With 90% of my patients, you can give them one item out of that box, and it works a treat. It’s such a simple idea, easy to set up and cost-effective.”

“The activity box has made an incredible difference,” says ward sister, Helen Edwardson. “I saw the way it transformed the care on Tiptree Ward. It’s really changed the way we think about our patients who are confused or have dementia. The box is a focal point of the ward and has significantly reduced the wandering of patients from the ward, and reduced the rate of falls.”

The project had to overcome a number of obstacles to get off the ground, not least securing funding. Once Carrie and her colleague, Helen Langthorne, had completed the project trial, they presented the activity box to Health Enterprise East (HEE) in the Bright Ideas Competition, 2007. It won first prize of £3,000.

“The stress levels of both patients and staff have come down and the toolkit has reduced the number of the patients who are described as ‘difficult to care for’,“ says Carrie. “Even though it hasn’t worked in certain areas, like A&E, what has come out of that is the possibility of developing a delirium-screening tool that can be used at the front door to risk assess patients who are more likely to have delirium, with its associated risks of falling, so ward staff can be made aware of these behaviour types.”

“If we look back at how we coped with acute confusion and wandering states before, this toolkit has given the nurses more time and the patients a better experience. I didn’t realise that, behind the scenes, there are so many other organisations that can support your ideas. I’m happy to be part of something that helps other nurses realise this.”

Supporting documents
Further information available from the NHS Institute website
Local results

Impact on quality of care
Staff feel they have more time to care and don’t feel like security guards following patients who are wandering. Patients are less likely to be seen as being ‘difficult to care for’. Patient stress levels are down and they are more likely to cooperate in taking their medication. This is especially important for patients who are prescribed antibiotics for urinary infections, which can be a contributing factor in delirium.

Impact on patient experience
When vulnerable patients are in a strange environment, it heightens their anxiety and makes it more likely that they will have a fall. Being in a calm environment, with familiar objects, means that patients feel more comfortable and their stay in hospital will be safer. When the box is in use, the café area becomes a communal area so that patients are less isolated.

Impact on staff experience
Because nurses had the idea and it was a very simple, cost-effective idea, everybody was really enthusiastic. Making the changes was not difficult and it did not mean big changes in processes or systems. The simplicity of the idea meant that it was straightforward and easy to implement, empowering staff and helping them deliver better care. Nursing patients with delirium can be challenging and stressful in any environment and busy acute wards are no exception – the distraction tool provided a positive way for nursing staff to manage this patient group therefore reducing staff stress.

Impact on cost reduction
The primary aim of the project was to improve care for a specific patient group, not to reduce the amounts of falls. Because of this the pilot cannot reliably quantify a reduction of falls to this piece of work. However the work and growing expertise of the staff became well known and Tiptree ward now receives more admissions from patient groups with a higher risk of falling.
Key themes and methodology

Leading by example

Nursing staff at the hospital had the permission and support of the organisation to develop ideas, be innovative, challenge current practice and make changes that could improve the quality of care and safety for their patients. Developing ideas in a demanding environment can be difficult. As nurses, we feel that we do not have the time to think. But, that very act of thinking differently and being creative steered this group of nurses to make real changes to the patient experience.

It is easy to carry on doing what we have always done and getting the same results we have had before, but we do need to try and build in some time to think about new ways of doing things.

Improvement tip

Thinking differently is the only real and sustainable bridge to get us from where we are now, to where we would like to be. Further, it is the extent to which we are willing to think differently that determines how great a difference we can really make. Use the tools for Thinking Differently and follow the three step process:

Phase one = stop before you start
Phase two = generate lots of ideas
Phase three = selecting and testing ideas to make a difference.
“I had supportive management and supportive staff and we had good rationale behind the idea. We had the evidence there to be able to put it into practice with confidence. If we look back to how we coped with acute confusion and wandering states before, this toolkit has given the nurses more time and the patients a better experience. I didn’t realise that, behind the scenes, there are so many other organisations that can support your ideas.”

Carrie Tyler
Ward sister
Case study: Ipswich Hospital NHS Trust

Seven Simple Steps – falls reduction programme
Ipswich Hospital NHS Trust developed a checklist observation tool of patient-centred activities across its complex care wards, designed to reduce falls in those at high risk. The programme was launched through a combination of staff training and support and is already delivering promising results.

Setting the scene
2,051 patient falls were recorded in 2008/09 within the trust, costing more than £131,000. The trust set an overall target to reduce falls by 25%.

The approach
Multidisciplinary training and raising awareness were incorporated into mandatory training for staff. Information packs have been developed to include information on medication that can increase the risk of falls and a flowchart identifying actions required in response to a patient fall. An initial baseline audit was carried out, looking at three months of inpatient falls data.

The Ipswich Hospital two-hourly falls prevention observation tool was developed through the identification of high-risk activities associated with inpatient falls, including both locally (identified via an incident reporting system) and nationally recognised elements of patient care.

The tool has seven simple steps:
- hydration – making sure the person has had something to drink
- checking toilet needs
- having the right footwear
- de-cluttering the area
- making sure things are in reach, like the call bell
- correctly fitted bedrail
- appropriate walking aid, if applicable.

The team used its experience of Leading Improvement in Patient Safety (LIPS) and The Productive Ward programmes.

“...If we can make sure people are safe from avoidable harm, it’s got to be worth doing. It reassures the patients’ relatives, as they can see some form of documentation - which is quite prominent - that shows that their relative is being looked after.”
Sandra Gillingham
Ward matron

Improvement tip
The Leading Improvement in Patient Safety (LIPS) programme is about building the capacity and capability within hospital teams to improve patient safety. The programme aims to help NHS trusts develop organisational plans for patient safety improvements and to build teams responsible for driving improvement across their organisation.
www.institute.nhs.uk/safer-care
How they did it

Most nurses can spot the dangers for patients when it comes to falls. But having a ‘piece of paper’, providing a simple but essential reminder, ensures that those skills are used to their maximum for every patient, every day.

“We looked at all the tools we’d introduced over a period of about 18 months to see what the trends were and what we were missing,” says Julie Sadler, head of patient experience and adult safeguarding. “From that, we realised that when people fall they’re doing everyday activities, or trying to, and what we needed to do was look at how we could take the risk elements out of that.”

The result was a simple checklist observation tool. This is completed regularly throughout the day and covers seven fundamental elements of care, including nutrition and hydration. The tool was introduced with one nurse leading and training around 50% of staff on the ward. In addition, a healthcare assistant from each ward was nominated as a falls prevention champion and they received additional training to help them disseminate learning among their colleagues.

The programme was piloted on one ward for three months with mixed success. The ward had chosen to introduce it with one nurse trained to champion it among her colleagues. There was some resistance to filling in ‘yet another piece of paper’, but attitudes changed towards the tool as the fall rate dropped dramatically.

Healthcare assistant, Laura Byrne, admits she was one of the reluctant ones. “It was hard work to start off with, but it’s now become second nature. It’s a good idea because it keeps you on top of things and doesn’t take long. Filling in the form helps you care for the patient as an individual, and you become more aware of their needs.”

By the end of the pilot, the programme had demonstrated how a ‘piece of paper’ could release time to care, rather than add to the workload. When someone falls, there are a multitude of actions to carry out, which takes two nurses, perhaps 20 minutes. This includes managing the fall, checking for injuries, filling out a risk form and notifying the doctor and family. So, it quickly became clear that completing an observation form to prevent a fall was a better, and more productive, use of nursing time. It takes much less time and results in higher quality care if we carry out prevention work than post-falls management.

Patient experience facilitator, Linda Collins supports Julie in rolling out the falls programme through training and education. “Different areas will have different levels of reduction. We’re aiming for a 25% reduction overall,” she says. “At the moment, on the eight wards where we currently have the Seven Simple Steps programme implemented, we’re looking at a 19–20% reduction, so we believe that, by the time we get every ward onto the programme, we should be getting somewhere near our target, which is just fantastic. We’re in the process of rolling out The Productive Ward and we are releasing time to care so it fits and dovetails into that beautifully.”
In addition to reducing falls, the team has improved the way falls data is collected. They produced a guide with examples on how to complete their Datix form.

The seven simple steps pilot took place on Grundisburgh, a complex care ward. Matron, Julie Tomlin describes how it worked: “We had a high number of patients having falls. The pilot involved devising a checklist of very basic things that could be done to try to reduce falls for patients at risk. We engaged all the staff on the ward, particularly the care assistants. There was initial scepticism, as they thought it would be time-consuming, but after a while they could see the benefits of doing it and now it’s become part of the care that people receive. As a result of this pilot, some beds have been purchased that go right down to the floor, which has been a great help to patients and nursing staff. Reducing the number of falls on the ward has released more time for other aspects of care.”

“It really has made a difference,” continues Julie. “I could walk onto that ward and the environment felt calm, I could see that the nurses felt in control – that was the biggest difference for me. Linda once went to do some training, took the wrong turning and walked onto the wrong ward, one which had not be targeted for the programme as its rate of falls was low. But, they said they really wanted to do it, so we put them on the programme. It just shows that people want to do it.”

“These are fundamental, all very simple things. They’re normal to us, but we thought maybe we’re not checking them frequently enough. So every two hours we ask the nurses to check the patients at risk, using this tool.”

Julie Sadler, head of patient experience and adult safeguarding

“There was initial scepticism, as staff thought it would be time consuming but after a while they could see the benefits of doing it and now it’s become part of the care that people receive. Reducing the number of falls on the ward has released more time for other aspects of care.”

Julie Tomlin
Matron
Local results

Impact on quality of care
The pilot project demonstrated a reduction of nearly two-thirds within the first three months of implementation on a complex elderly care ward.

The programme has significantly reduced the number of falls, improved patient safety and released staff time. It has also led to other benefits, such as fewer complaints from relatives and improved staff morale.

Through the programme, the trust has improved the information provided via the risk reporting system. This has led to a greater understanding of where to target resources. The trust has developed a guide to completing the Datix form, which provides examples of the detail required when a fall has occurred.

Impact on patient experience
Results also identified that patients felt more confident and needed to use their call bells less. As a result of the pilot, some additional beds have been purchased that go right down to the floor to assist specific patient groups when getting in and out of bed.

Impact on staff experience
A staff evaluation after three months identified that time had been saved as fewer slips, trips and falls resulted in less need for reactive management. Overall, staff morale increased due to the staff’s improved knowledge and a sense of ownership and achievement.

Multidisciplinary training and raising awareness of falls and the seven simple steps programme was key to this programme. This was incorporated into mandatory training, including training for junior doctors and pharmacy staff.

Return on investment calculation
Costs of the following inputs were calculated for both the pilot and roll out phases. This included: dedicated time from the project lead; dedicated time from a system analyst to prepare information systems and feedback; training ward staff; cost of observation tool material and posters to present results to ward staff.

Impact costs were calculated in terms of the savings made from reductions in the incidence of falls by harm category. For every £1 spent the seven simple steps programme generates £6.24 of benefits. This calculation does not take into account the additional quality benefits that have not been monetised. The ROI figure is also sensitive to the starting point (falls incidence baseline) of a ward. The pilot ward, which started from a much lower base than the additional seven wards was able to reduce its incidence of falls more significantly.
Key themes and methodology

Leading by example
Improvement work is inspired and driven by people, not things. The success of the paper based tool at Ipswich Hospital NHS Trust is all about the people using it. The programme was driven by senior nurses working at an individual ward level. On the ward, the familiarity and visibility of these nurses gave them the credibility.

Successful improvement works by managing the ‘human dimensions of change’. Having senior nurses demonstrating a commitment and promoting a ‘can do’ culture is absolutely core to good change management. Change leaders are people who really understand the work, who have an in-depth knowledge of the process and the ability to be passionate and involve others in making the change happen.

Improvement tip

What is trust?
If you have a good relationship and mutual trust between yourself and those you are working with, you are more likely to find them receptive to the new ways of thinking and the improvement methods you want to introduce. Find out more on human dimensions of change in the improvement leader’s guides ‘managing the human dimensions of change’.

The Improvement Leader’s Guide: managing the human dimensions of change

Further information available from the NHS Institute website
Improvement tip

Since improvements depend on the actions of people, ultimately, it comes down to winning hearts and minds. People are not machines. You cannot make others simple do as they are told, nor can you be everywhere at once in order to watch others to ensure compliance.

Command and control cannot work in a human-intensive system like health and social care because there can never be enough commanders and controllers to go around and none of us are willing to put up with the approach that would be required. So, we need to win the hearts and minds.

The Improvement Leader’s Guide: managing the human dimensions of change

“At the end of the trial period, I could walk onto that ward and the environment felt calm, I could see that the nurses felt in control – that was the biggest difference for me.”

Julie Sadler
Head of patient experience and adult safeguarding
How to measure...Staying safe - preventing falls

The national picture
Every fall that a patient has under your care should be recorded through your local risk management systems (LRMS). Certain incidents are required to be reported to the National Patient Safety Agency (NPSA) and certain important events that affect people who use their service submitted to the NPSA are required to be reported to Care Quality Commission (CQC). The National Patient Safety Agency produces quarterly data summaries which include all the patient safety incidents reported by NHS organisations in England and Wales.

How are falls defined?
The definition adopted by the Nurse Sensitive Outcome Indicators is “an unplanned/unintentional descent to the floor, with injury, regardless of cause (slip, trip, fall from a bed/Chair or other, whether assisted or unassisted fall). Patients ‘found on floor’ should be assumed as falls unless confirmed as intentional acts.”

http://www.ic.nhs.uk/services/measuring-for-quality-improvement/what-is-happening-on-indicators-for

In addition to defining a fall, you can categorise falls into different levels of severity.

The NPSA (http://www.nrls.npsa.nhs.uk/resources/?entryid45=59821) categorises falls into these categories with their respective definitions:

- **no harm** – where no harm came to the patients
- **low harm** – where the fall resulting harm that required first aid, minor treatment, extra observation or medication
- **moderate harm** – where the fall resulted in harm that was likely to require outpatient treatment, admission to hospital, surgery or a longer stay in hospital
- **severe harm** – Where permanent harm, such as brain damage or disability, was likely to result from the fall
- **death** – Where death was the direct result of the fall.

How might falls be recorded and measured locally?
As well as reporting falls to the National Reporting and Learning Service (NRLS), many organisations will be monitoring falls on a more regular basis and at ward level. How this data is used will vary but you should consider using the principles of good measurement outlined in the measurement section. For example, display the information on a simple run chart so that the rate of falls over time is made clear to all staff.

Some organisations might also benchmark their wards against one another and produce dashboards which show how one ward is performing compared to another. This can be useful as it can help to incentivise the spread of best practice, however there is always the danger that those wards that are specifically targeting falls start to record them more accurately – and this can make it look like their performance is poor. Whenever making comparisons it is vital do it in the spirit of improvement and understand the wider context.
Another powerful way of displaying falls data is to use a ‘safety cross’ which graphically shows how many days it has been since the last fall in any given ward or organisation. Safety crosses are an approach that are illustrated in The Productive Ward – releasing time to care www.institute.nhs.uk/productiveward programmes.

### Falls calendar

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- % of high risk patients with an action plan
- % of patients who received the four basics of falls prevention.

### Measurement when making improvements

If you are starting to work on falls, you should begin by looking at what you are already measuring and what other teams in your department or organisation may be collecting, so that you save time and use existing systems if they are appropriate. You should use the **seven steps to measurement** framework outlined in the measurement section (page 21) to link together what you are already collecting around falls and also see gaps where you might need to collect additional information.

As well as collecting falls rates, it is useful to think about what process measures may be useful (see measurement section page 16 for information about process measures). Some examples, of process measures taken from the Patient Safety First Campaign’s ‘How to Guide for reducing harm from falls’ are:

- % of staff who have received falls management training
- % of patients with appropriate observations after a fall