Nursing Times

The Health Foundation
Inspiring Improvement

Nursing a safer future

How nurses are using proactive approaches to manage patient safety

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Nursing Times and the Health Foundation

Introduction

Nurses are well placed to identify how to improve care, says Jo Bibby, because of their prolonged patient contact and ability to assess safety hazards in the care provided

In the last decade, there have been a number of tragic cases of failures in healthcare that might have been preventable. The Francis Inquiry into care failings at Mid Staffordshire Foundation Trust and the tragic events at Winterbourne View and University Hospitals of Morecambe Bay Foundation Trust have reignited debates about how to provide the safest possible care.

Nurses are well placed to improve the safety of people in their care. They have prolonged contact with their patients, whether in hospital, at home or in other residential settings. This gives them a unique view, allowing them to see the whole care process and to identify problems in the system and the potential for harm for patients.

Nurses are already doing impressive work to improve the safety of their patients. For example, they are the group most likely to complete an incident form. Reductions in MRSA bacteraemia and pressure ulcers achieved through the Saving Lives campaign and SKIN bundles are also testament to nurses' commitment to improving patient care.

However, much remains to be done. To date, improvement activity has mainly focused on a handful of harms and relied on reactive approaches to safety management following harm to patients.

The Health Foundation believes that we must build on these approaches and move towards a more proactive approach to safety management, tackling the more complex hidden harms and protecting patients. Assessing safety by what has happened in the past does not give us the whole picture; nor does it tell us how safe care is now or will be in the future.

A proactive approach to managing safety involves examining conditions needed for safe care, identifying potential harms and taking action to prevent them.

To ensure that low rates of harm are down to good judgement and practice rather than luck, safety needs to be built into the system. This is demonstrated through Professor James Reason's model of safety, which uses the metaphor of Swiss cheese. The individual holes in the cheese represent hazards. Some hazards may be caused by active failures by healthcare providers and some by the wider environment. They might not cause harm by themselves, but together, when a number of holes line up, they represent a real threat to patient safety.

All those involved in planning, commissioning or providing healthcare need to actively search out these hazards and be vigilant against them – either designing them out of the system or managing those that cannot be removed.

Hazards to safety can be particular to a given harm (such as infections) or can be more general – such as the lack of an open learning culture, insufficient staffing levels or skills mix, or a lack of clear processes that leads to confusion. By focusing on the design of the whole pathway, the solutions become part of what we do rather than time-consuming add-ons that take nurses away from their primary purpose of direct patient care.

As the nurse-led initiatives highlighted in this supplement confirm, effective safety management requires a clear understanding of the daily challenges healthcare professionals face in their work, a pathway design focused on the patient's safety, continuous monitoring and swift responses to changing circumstances.

We hope that the stories in this supplement will trigger discussion and debate and inspire new ways of thinking about how to make care safer for your patients.

Jo Bibby,
Director of Strategy, The Health Foundation

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Taking the temperature on safety

The NHS Safety Thermometer is useful for engaging nurses in measuring and reducing common healthcare-associated harms across all settings, writes Chris Mahony

Measuring safety is something of a holy grail in healthcare.

The search must take account of the difference between measuring for performance management (using data that allows comparison between organisations and teams) and collecting data to improve practice.

Over the last three years the QIPP (Quality, Innovation, Productivity and Prevention) safer care work-stream has developed the NHS Safety Thermometer (ST) and seen it widely adopted throughout the NHS and beyond. The tool focuses on four of the most common healthcare-associated harms: pressure ulcers, falls, urinary infections in patients with catheters and venous thromboembolism.

As national QIPP safer care director Maxine Power explains, the ST is effectively a census measuring the safety of every person being cared for.

"As part of their normal activity one day a month, health professionals check that every patient is receiving care that is harm free with respect to these four areas. Safety management has been characterised by a sense of negativity – with managers using it to highlight things that go wrong. The ST allows a team or organisation to say how many people they are caring for do not have one of these four harms at a point in time."

In developing the ST, Ms Power and her colleagues agreed that it should not become another audit burden on nursing staff – with clear results available in "real time".

She says: "We decided the ST should not take more than ten minutes per patient and data collection should fit with daily workflow of frontline health professionals, for example during ward rounds.

"The tool had to give a timely summary of results that teams could use to shape daily work."

"Few organisations, probably none, use the ST to its full potential," she says of a tool that has 14 high-level indicators and allows 252 permutations.

With NHS organisations encouraged by incentive payments to establish baseline data for the four harms in 2012/13, some 719 healthcare providers had signed up by March 2013.

One day a month, healthcare professionals, often nurses, ask the patient questions around these harms.

The tool is now being used extensively in the community and acute hospitals.

Ms Power says: "The ST is one of the few tools that can be used in all settings and we now have more data from the community – including district nursing teams and nursing homes – than acute hospitals."

The personal, point-of-care contact between health professionals and patient is one of its key attributes, Ms Power says.

"The ST involves nurse and patient talking about harm together. Data collection gives health professionals a sense of ownership of the data. If you own it, there is a transparency because you can't say 'I didn't know'."

She continues: "The best units are using data as real time information to plan areas they want to investigate further and improve on. The results are available at the push of a button."

There has been some concern that the tool is being mis-used for comparison between organisations. This prompted chief nursing officer for England Jane Cummings to join NHS medical director Sir Bruce Keogh to remind trust executives last year that it should measure local improvement over time rather than compare organisations.

They noted that differences in data collection methods and patient mix make direct comparisons inappropriate.

Ms Power acknowledges the criticism: "The ST has not been received with open arms: the operational definitions have wide interpretation and in some cases organisations are adapting definitions. It has been designed for health professionals to look at their own service and organisation over time."

National data, she suggests, lets organisations "contextualise" their performance and respond if they appear to be an outlier.

"We are trying to get people to think about the patient rather than the organisation. What is their experience of the hospital, nursing home or community? It is about sharing accountability for harms."

Leadership for this will come from frontline care, notably ward managers and sisters, Ms Power says. "When they are on board and understand the importance of recognising and addressing significant variations in harms the impact is huge."

Maxine Power is a governor of the Health Foundation, which has supported this supplement. She is also director of innovation and improvement science at Salford Royal NHS Foundation Trust. For more information **http://harmfreecare.org/measurement/nhs-safety-thermometer/**

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Using the thermometer on the frontline – top tips

The whole team should understand why you are doing the survey

Definitions of harm should be agreed and understood; these should be discussed by the team beforehand

Develop a standard way of introducing the survey, mentioning the four harms

Check each other's data entries

Share your results swiftly after the survey to keep people engaged and interested

Before doing the survey, discuss as a team what the results say about improvement priorities and areas for further investigation

Providing a helping hand

Ward sisters have been freed up to provide clinical leadership and direct patient care at UCLH with some help from a concierge service, writes Anne Gulland

Many ward sisters and charge nurses are frustrated that small admin jobs distract them from driving improvement in safety and patient care.

A 2011 audit of how sisters and charge nurses at University College London Hospitals NHS Foundation Trust (UCLH) spent their time showed that less than a third of their working day was spent on clinical leadership.

To reverse this, UCLH won funding from the Health Foundation to implement a "concierge" project to help ward sisters and charge nurses with tasks that are difficult to resolve. The project focuses on five corporate departments: workforce, ICT, finance, procurement and estates and facilities. By reducing time spent on these tasks, ward sisters can spend more time providing clinical leadership, including driving safety improvement and promoting a learning culture. The Health Foundation is keen to see senior nurses use any time released to improve safety. A recent Health Foundation report, *Measuring and Monitoring of Safety*, explored how "a sensitivity to operations" encourages health professionals and managers to look beyond routine safety measures.

Staffed by a team of four, including a manager, it provides support with corporate tasks to the trust's 44 inpatient ward sisters. The service began in April and will run for 12 months, collecting data about the issues that impact ward sisters. This data will support service improvement in the corporate departments for a further year. The aim is that by April 2015 ward sisters will spend at least 75% of their time on clinical leadership, including driving safety improvement by close monitoring of their team, patients and environment.

Sally Beyzade says that in her seven years as a ward sister she has noticed that she spends less time with patients and staff. More tasks, such as sorting out maternity leave entitlement, have become the responsibility of ward sisters. Often these tasks involve extensive time looking for information and making phone calls.

Ms Beyzade says: "Most ward sisters are brilliant nurses but we don't have the time to nurse because of all the things we're responsible for. The project is important because good leadership on the ward is vital to ensure safety, a good patient experience and better patient outcomes.

"It's not that I'm far away. I'm always contactable but I can make things better by being around, by questioning what's happening with a patient's nutrition and medication. I have more authority to question things than a junior nurse," she says.

The trust was inspired by concierge companies that do all the humdrum jobs for time-poor but cash-rich executives: finding nannies, making restaurant reservations and booking flights. UCLH wanted its ward sisters to be VIPs, says Natalie Howard, manager of the concierge service.

Ward sisters will normally only contact the service if they have a problem, such as missing equipment.

"They contact us once and shouldn't have to again. We keep them updated with what's happening. We build trust so they're confident that they can give us the problem," says Ms Howard.

As senior nurses spend more time on clinical leadership, the trust hopes to see improved patient experience; a reduction in patient harm; improved discharge planning and decreased length of stay.

Katherine Fenton, chief nurse at the trust, says the concierge service will enable ward sisters to spend more time "leading their teams and improving the care their patients receive. For example, they will have the time to assess patient safety and work to identify any conceivable risk."

There was some initial scepticism, says Ms Howard, but 41 out of 44 sisters went to an event to learn about the service.

"We developed the service with them and asked what would make a difference to them," she says, adding that because ward sisters and charge nurses are prized for their competence they sometimes believe they are best off doing things themselves.

"We're not computer whizzes or supplies people. We're nurses," says Ms Beyzade. And now they are nurses who have more time to focus on the many factors that improve safety and experience.

For more information visit **www.health.org.uk/liberating-sisters-to-lead**

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Reducing insulin errors

An insulin chart and poster project in North Tees and Hartlepool is ensuring safer care and reduced medication errors for patients with diabetes, finds Anne Gulland

According to the National Diabetes Inpatient Audit, nearly 4,000 insulin medication errors are made every week. Many happen when a person with diabetes is cared for by health professionals without expertise in diabetes after being admitted for a condition unrelated to diabetes.

The report – a snapshot of insulin prescribing in hospitals over a week in England and Wales – shows those who experienced errors suffered over twice as many severe hypoglycaemic episodes as patients who had no medication errors.

The then North East NHS Strategic Health Authority knew real improvements could be made in insulin management.

The problem with insulin is that it is a complex drug, says Lisa Doughty, diabetes nurse specialist at North Tees and Hartlepool NHS Foundation Trust. One patient can be on two units and another can be on 200; there are different types of insulin; and different devices for delivering the medication. Basic communication errors can occur – a patient is told to take insulin at dinner time but, for some, dinner is a midday meal, for others the evening meal.

Jean MacLeod, consultant physician with an interest in diabetes and associate medical director for patient safety at the trust, adds: "There's an acceptance of error among patients and professionals that wouldn't be applied to another drug."

A working group from across the North East region set up the Regional Insulin Safety and Knowledge project, part funded by the Health Foundation and NHS Diabetes. The group produced an insulin safety poster, with advice on how insulin prescriptions should be written. They developed an insulin chart and linked education package for hospitals.

The poster ensures staff administering the medication and patients self-managing know what to do. The chart includes:

- Generic name or type, and trade name
- Whether the insulin is clear or cloudy
- Written number and figures for units
- Time the dose is taken, ie breakfast, lunch, evening meal and bed time
- Delivery device

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The tools are used most effectively with patients' NHS insulin passport recommended by the NPSA, a patient-held record that documents current insulin products and supports a safety check for prescribing, dispensing and administering.

"It was important to work across all the trusts in the region," says Dr MacLeod, "as nurses and doctors rotate between them. There are eight foundation trusts in this region and they all use a different prescription chart," she says. The group has produced a standard chart, which was launched at Sunderland Royal Infirmary at the end of last year and will be rolled out trust by trust, tweaked as it goes. Staff are encouraged to let patients who come into hospital manage their own insulin.

Emma Nunez, programme manager, says the aim was simple. "If you're in a generalist area with a patient with diabetes you should be able to manage safety without needing specialist intervention.

"With correct information entered onto their NHS insulin passport the margin for error at every stage of the process – from prescriber to pharmacist to patient – should be smaller," says Dr MacLeod.

"While the chart project has focused on inpatient wards, district nurses will also see improvements as a result of the communication poster," says Ms Doughty.

When Ms Doughty helped district nurses, she saw the problems they faced. "Sometimes I would go into patients' homes and I wouldn't know where their folder was. The insulin would be in another area and the device in another. You'd waste time trying to get it all together," she says.

Ms Doughty's North Tees and Hartlepool Trust Community Team is introducing storage boxes so everything a district nurse needs is in one place: their chart; the medication; the delivery device; the poster; guidance on hypoglycaemia; lockable needles; and some glucose tablets.

And she found housebound patients had not had a review of their medication for some time. "If we prescribe correctly we know the first part of the insulin administration is correct," she says.

Once that can be said across the country, this should contribute to a decline in insulin-related mistakes.

For a copy of the 2012 National Diabetes Inpatient Audit go to www.hscic.gov.uk/catalogue/PUB10506 or see the new diabetes section at the Health Foundation's resource centre at **www.patientsafetynow.org.uk**

Taking a systematic approach to safety through handovers

Distraction-free handovers improve effective communication and boost patient safety, as the Safer Clinical Systems pilot is demonstrating writes Mark Gould

A poem by 11-year-old Mia Richardson is playing a part in improving patient safety at Royal Manchester Children's Hospital (RMCH). Mia had heard a lot about safety from her mother, Lesley Richardson, who is a nurse and clinical educator in the acute care team at RMCH within Central Manchester University Hospitals NHS Foundation Trust.

Ms Richardson is part of the team implementing Safer Clinical Systems, a programme encouraging clinical staff to bring a fresh eye to problems with clinical systems and introducing ways of putting them right: reducing risks and improving relations with children, families and carers. The Safer Clinical Systems programme, funded by the Health Foundation, was launched in 2008 and is being trialled at eight sites across the NHS.

Ms Richardson said Mia heard her talk about improving handovers and decided to help by writing a poem spelling out that nothing should interrupt this important element of care for children with complex conditions. Mia's poem reads: "Nurses spread the word, to make sure handovers can be heard, no bleeps, interruptions, no phones, all except the crash bleep tone".

The poem will appear on posters in the hospital to remind nursing teams that medical handover requires minimal distractions to ensure timely and effective sharing of information. The Safer Clinical Systems programme that inspired it is testing ways to increase reliability in systems of care and reduce the risk in clinical systems; building on evidence of the extent to which clinical systems and processes fail, and the attendant potential for harm.

In Manchester, the programme focuses on handover issues involving children with medical complexity, that often require input from several specialities.

Lead nurse Sarah Ingleby, the project manager, says after the review of a number of children with medical complexity, there was a drive to review processes surrounding this group of children.

It was clear handover and communication were key areas where safety could be improved as there was often a number of teams and organisations involved. This concern, coupled with the potential increase in risks, has grown with the rise in numbers of children in the healthcare setting with very complex needs.

Ms Ingleby says that in the past such children were often nursed within one ward area. Now, approximately 30% have complex needs (defined for the project as managed by three or more specialties) and can be admitted for a variety of reasons so will be found on a range of specialty wards.

These children can face frequent visits to hospital with lengthy in-patient stays. This, of course, brings with it potential hazards and risks, that the Safer Clinical Systems programme has helped identify.

Children with complex care needs often have a number of different teams and disciplines looking after them, which can create risks. To address this, the project has introduced a care co-ordinator (nurse or allied health professional) to ensure joined-up care for this group of children.

The quality of a handover influenced the resulting care and the potential for avoidable harm

Numerous changes have been introduced as part of the Safer Clinical Systems work project, including improving the venue for medical handover, the development of handover standards (to be rolled out trust-wide) and human factors training. There has also been an addition to the electronic system used for handover which enables the generation of a distinctive "flag" for patients who have two or more specialist teams involved in their care. This will ensure any additional needs are communicated across shifts.

The project team observed ward rounds to ensure all therapies and/or diagnostics were delivered in a timely manner – for example with referrals to the speech and language therapy team. Changes to the referral processes have reduced waiting times. These include introducing electronic referrals, a more detailed explanation of the patient, their condition and the test or intervention required and ensuring there were adequate numbers of therapists in the team to support the patients.

Before the changes, just 40% of referrals were seen within the recommended 48 hours – that figure is now 100%.

As Ms Ingleby says "These were simple changes – not expensive – and they clearly contributed to improved care."

The team also wanted to improve communication with patients' families and carers to ensure that they have information about decisions taken at ward rounds, treatment plans and the likely discharge date and plan.

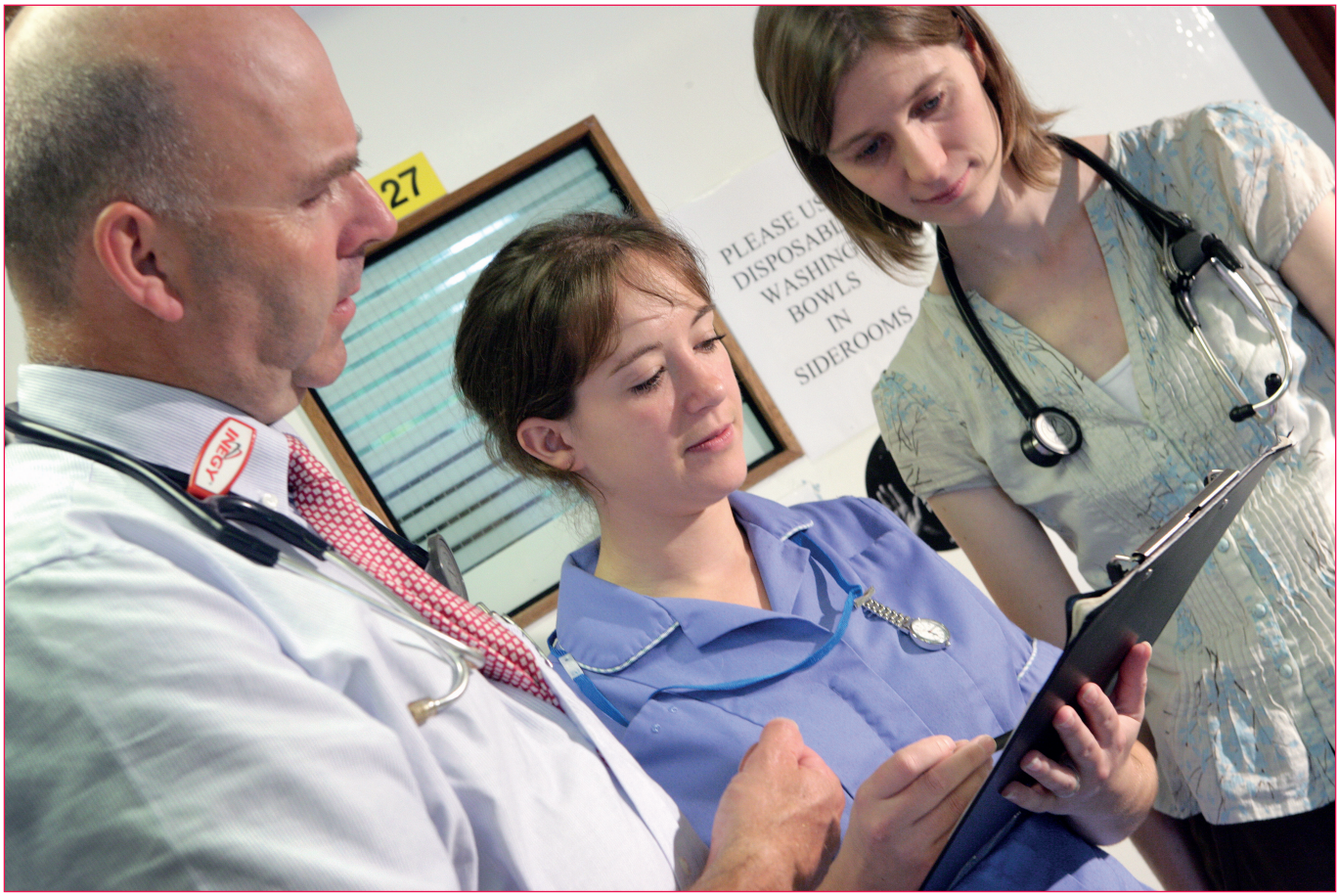
"We want to give families more power and more confidence to ask questions," Ms Ingleby says. One of the analyses of practice includes asking the families questions following the ward round to check their understanding of what was said and if they felt informed of the plan.

For the whole project, consultant support was crucial to achieve a change in behaviour and ensuring innovation was acceptable and sustainable. Having a strong consultant lead within the project ensured buy-in from all teams.

The Safer Clinical Systems approach has since been used in another aspect of work across the trust – to improve adherence to the "Sepsis Six" guidelines.

The guidelines recommend that six defined diagnostic and therapeutic steps should be delivered within one hour of the initial diagnosis of sepsis.

The sepsis project team used a "swim



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lane map" and hierarchical task analysis tool, a technique used in engineering, to look at where delays or failures were occurring. This identified that routine activities, such as taking blood for cultures, were taking too long. Now a designated trolley equipped for speedy sample taking is to be trialled for clinicians.

Ms Ingleby says: "We have seen significant improvements and we look forward to assessing our outcome measures to evaluate the changes. We anticipate applying the approach to other aspects and processes across the Trust."

At Birmingham Children's Hospital, the Safer Clinical Systems project examined the Hospital at Night Clinical Handover Pathway when the care of patients from 13 medical specialties is transferred to a single "hospital at night" team for the duration of the night and then transferred back in the morning. Project manager Victoria Demery, a senior nurse by background, said analysis of data from the hospital at night pathway revealed that handover was crucial; the quality of a handover influenced the resulting care and the potential for avoidable harm.

She explains: "While we found that handover was crucial to enable the Hospital at Night team to prioritise their care effectively, we also identified that it was the quality of this information that was critical to the successful transfer of information between the day and night teams."

The team worked with the frontline staff involved to identify three safety critical steps where the potential risk and the likelihood of harm occurring was most significant. These steps are: accuracy of information, preparation of information and communication of information.

From these three safety critical steps, the team carried out an options appraisal process with senior clinicians and nurses to identify the most appropriate interventions. Three interventions address one or more of the safety critical steps.

The team began implementing their first intervention last month, and Ms Demery expects that it will be some months before measurable improvements become apparent.

She says, "Because of the complexity of the system, it will take time to introduce each of the 13 medical teams to the three interventions. We're looking to make organisational-wide changes to practice, which takes time and energy. We expect to see pockets of improved practice within weeks of launching an intervention in a speciality team. However trust-wide improvements will take longer."

At Birmingham Children's Hospital, the trust board has committed the organisation to improving clinical handover as part of their safety strategy. The set of safety measures is reviewed on a monthly basis at both senior manager and board level to monitor improvements.

Ms Demery says: "Being involved in Safer Clinical Systems has been a valuable experience for the project team and the organisation as a whole. The lessons that we have learned over the past 18 months will shape future change improvement work streams.

"We have already replicated some of the lessons into other organisational projects to improve patient safety. By working with frontline staff who are committed to improving the safety of patients, we can tailor and time improvements to give interventions the best possible chance of embedding in a complex system, resulting in a really tangible improvement for patients and their families."

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