Feedback from reporting patient safety incidents - are NHS trusts learning lessons?

Introduction:
Patient safety is a high priority in healthcare and much time, effort and money is being invested into studying how it can be improved upon. Around 10% of patients admitted to NHS hospitals every year experience some kind of health care related harm. Estimates show that half of these incidents could be prevented. The Department of Health’s Patient Safety Research Portfolio (PSRP) is a national drive to study errors made in healthcare, measure them and find ways of preventing them in the future.

This briefing paper is based on work undertaken by a team of researchers from Coventry University, Imperial College London, and University of Warwick, and was led by Professor Louise Wallace, director of research at the Applied Research Centre Health & Lifestyles Interventions at Coventry University. For the study, first published in 2006, the researchers examined how well NHS organisations had attempted to use the information they gathered from adverse clinical incidents and whether they were learning from it. By looking at existing relevant research worldwide, interviewing experts, surveying NHS organisations (acute, community and ambulance), consulting healthcare and other high risk industry safety experts and NHS risk managers, and investigating case studies of good practice, they developed a model to assess how ready NHS systems were to learn from incidents. This is known as Safety Action and Information Feedback from Incident Reporting (SAIFIR). The study is being highlighted now as part of a new drive to promote all the many pieces of research into patient safety carried out by the PSRP.

This briefing paper is aimed at healthcare professionals working in the UK and abroad, patients and carers using NHS services, academics and health service managers.

Key Messages:

- There is too much focus on reporting of adverse clinical incidents and not enough on learning lessons from those incidents to prevent them happening again
- There is a conceptual framework (SAIFIR) that can be used to test the key features of local systems
- A tenth of NHS trusts give no information back about the outcome of investigating an adverse incident to the people who reported the incident
- Trusts should work harder to improve integrating sources of risk information, sharing solutions, implementing recommended changes and promoting a safety culture
- Trusts should consider reviewing their staff newsletters to make them more effective and consider making changes such as allowing staff to feedback about feedback
- A common framework for safety feedback processes that integrates local and national level systems could help the ability to learn from failures at service level
- Managers and staff are expected to implement changes that have been recommended following an incident, but there are no formal systems to monitor how those changes are going.
The study’s overall aim was to look at potentially effective ways of providing useful feedback from incident reporting systems in the NHS. Its specific aims were to:

- establish the different kinds of feedback systems used in healthcare and other sectors
- look at how these feedback systems might be affected by the quality and comprehensiveness of incident reporting systems
- study how effective these feedback systems seemed to be in communication and creating safer systems after a patient safety incident
- examine how effective these mechanisms were on culture and the willingness of staff to report incidents in future.

Background:

There is a growing trend for greater scrutiny of healthcare, NHS organisations and the staff who work in them. Patient safety, preventing medical errors and reporting of adverse events are all a high priority for the government.

A drive to tackle these issues began shortly after the publication of a report by the Chief Medical Officer Sir Liam Donaldson in 2000 that looked into adverse events in the NHS.

It found that 400 people die or are seriously injured every year because of an adverse event involving a medical device and 10,000 people a year have a serious adverse reaction to drugs.

Other estimates say there are around 850,000 adverse events a year in NHS hospitals with a resulting cost of £2billion in additional hospital stays. This also leads to clinical negligence claims that cost the NHS around £400million a year.

As well as setting up the National Patient Safety Agency (NPSA) in 2001, the government launched a large scale research programme to:

- explore the size and nature of the problem
- understand the factors causing harm
- develop interventions to reduce errors
- assess how effective have the attempts to reduce errors been
- implement ways of guaranteeing change in people and organisations.

Clinical incident reporting systems in the NHS are central to measuring patient safety in NHS organisations and feed into the national system known as the National Reporting and Learning System (NRLS) set up by the NPSA.

Much effort has gone into promoting safety through learning from reported adverse events, but the focus so far in other research has been more on methods of reporting and encouraging reporting rather than how to learn from incidents and change practice.

Aims of the Study:

The study’s overall aim was to look at potentially effective ways of providing useful feedback from incident reporting systems in the NHS.

About the Study:

The researchers used several methods for their research including:

- carrying out a systematic review of existing relevant research worldwide
- studying the most suitable pieces of research in-depth
- interviewing healthcare and non-healthcare industry experts
- surveying all NHS trusts in England and Wales
- investigating case studies of good practice, including the use of safety newsletters and PDA based mobile incident reporting and feedback
- holding an expert’s workshop made up of safety experts from several industries, Royal Colleges, healthcare managers and clinicians
- developing a framework to help develop feedback processes in health care.

Practical findings:

The researchers began their work from the basis that existing clinical incident reporting systems in the NHS take a long time to feed back information and recommendations from the analysis of failures.

Within current systems, there is also little or no systematic follow-up of recommendations proposed to prevent recurrence of specific failures.

A general lack of clarity about priorities for improvement and a lack of effort to develop solutions to prevent specific adverse events recurring are additional problems.

Review of research

Firstly, the researchers reviewed existing studies on this subject worldwide and initially considered 2,002 potentially relevant articles, of which 193 were chosen and their data looked at.

From those, they selected 29 articles that referred to 23 case reports of healthcare incident reporting feedback systems to study in-depth.

To help with this process, the researchers carried out 18 interviews with healthcare and non-healthcare industry experts to discuss safety in health care and high risk industries such as rail, mining, maritime, nuclear power and aviation industries.

They also studied relevant published policy within healthcare including guidance from the Department of Health, NPSA and NHS Litigation Authority, and Australian and North American equivalents.

From taking all of these into account, the researchers developed a theoretical framework called the Safety Action and Information Feedback from Incident Reporting (SAIFIR) framework.

The SAIFIR framework provided a model of the safety feedback process for incident reporting based upon the best practices identified from the researchers’ review and tested against expert opinion in healthcare and non health care industries.
This tool was used to identify specific actions taken to improve the safety of work systems and to identify broad dissemination of information to raise general awareness of current risks to the safety of operations.

Within this tool, the researchers categorised five different modes of action and information feedback:

- **Mode A** was immediate feedback and acknowledgement to the person reporting an incident or people in the affected service and this was called “bounce-back information”

- **Mode B** was aimed at “rapid response actions” such as measures taken against immediate and serious threats to safety

- **Mode C** was the dissemination of “risk awareness information” on current system vulnerabilities from the analysis of incident reports in the form of safety newsletters

- **Mode D** was feedback information that “informs staff of action taken” including telling the person who reported the incident in the first place

- **Mode E** was “systems improvement actions” including specific action plans for improvements to work systems that addressed problems identified previously.

The researchers surveyed the 23 cases of healthcare incident reporting feedback systems they had found from their review of existing research to see which of the five feedback modes had been used.

They found that all systems had used feedback mode E, which allowed specific actions to be taken for improving safety of care delivery processes and most had used mode C, meaning they had used a form of safety newsletter.

Fewer (70%) had used mode B, meaning having employed rapid response actions.

Of the 23 cases, 13 had used four out of the five feedback modes and just four cases had used all of the feedback modes.

The least used feedback mode was mode A (bounce-back information) and only 39% of the cases looked at had employed this mode, showing a lack of capability or willingness to report back to the individual who first reported an incident.

The findings were presented to a gathering of 71 people at an expert workshop organised by the researchers. These experts included NHS risk management managers, clinicians, representatives of professional healthcare staff, regulators, and experts from other high risk industries such as the aviation and nuclear industries.

The people attending agreed that developing effective safety feedback processes for incident monitoring was a significant challenge for NHS trusts because of the high volume of reports received at the local organisation level, especially in hospital settings.

Safety feedback, currently in the NHS, was given on an ad-hoc basis, they agreed, and there was more focus on reporting mechanisms rather than on feedback, which was sometimes just an afterthought.

They concluded that reporting rates of adverse incidents were limited in their ability to give a true picture of safety at a particular NHS organisation and were, at best, an indicator of the openness of the reporting culture that existed at a trust. This event helped to refine the SAIFIR model.

**Survey of NHS trusts**

The researchers set out to survey all 607 NHS trusts in England and Wales at the time this study was carried out, about their risk reporting systems. They got a 57.8% response rate from the trusts’ risk management leads.

Their work was consistent with the key findings of two surveys confined to provider trusts in England carried out around the same time by the National Audit Office.

The aims of the researcher’s own survey were to understand:

- how trusts were developing a learning culture
- the development of reporting systems
- the analysis and use of information from incidents, and the place of incident investigation in this process
- how solutions were formulated
- how changes were implemented
- the use of feedback and methods of dissemination within and between local organisations.

They found that the majority of trusts were reporting externally, but at least a third of them received no feedback from their strategic health authority/region.

Trust-wide incident reporting systems were confidential rather than anonymous, so that feedback was not excluded. Analysis of incidents was confined to actual incidents in a third of trusts, which suggested that near misses were either not being reported in these trusts or were being ignored.

How many reported incidents were actually investigated varied considerably from trust to trust and the quality of reports was also variable.

Systems for directly monitoring the impact of recommendations for action following adverse incidents did not exist in around a quarter of trusts.

Overall, the researchers found there was evidence within trusts that staff who reported incidents were not routinely thanked, acknowledged, nor informed of progress, although most were informed of the outcome of any investigation, via a formal report or less often, a personal letter.
Patients were generally informed at the start and end of the process, but this was most often in the context of complaint procedures.

**Using the SAIFIR model**

The researchers used their SAIFIR feedback model on the data they had from the NHS trusts survey.

They found that the risk reporting and feedback systems of the NHS trusts surveyed were highly variable in terms of coverage of reporting and feedback.

Mode A feedback – acknowledgement to the person reporting an incident – was only given by a third of trusts while the Mode B “rapid response action” was not given by any trusts.

The Mode C dissemination of risk awareness information was practiced in all trusts, mainly by newsletters, group meetings and training.

Only two thirds of trusts used the Mode D feedback whereby they informed staff of actions taken, in particular informing the person who reported an incident in the first place. However, a tenth of trusts gave no outcome information to staff routinely.

Around two thirds of trusts used Mode E feedback of improvements in work systems with action taken, but 25% had no systems for monitoring the impact of this action, and 27% of risk management leads responding said they believed it was not acted upon.

The survey results also showed there was considerable progress to be made in most trusts, particularly in integrating sources of risk information, sharing of solutions in changing working practices within and between trusts, implementing and monitoring recommendations, and promoting a safety culture with visible senior leadership.

When the results from the survey were presented to the participants at the expert workshop, this helped them to choose and target in-depth case studies of aspects of feedback in NHS trusts.

**Case studies**

The final stage of this overall study was to examine in detail examples of good, or unsuccessful, attempts to develop effective feedback systems in NHS trusts.

Four cases studies were chosen and the first looked at a NHS trust’s incident reporting system and the way it gave feedback to the person reporting an incident.

The other three case studies focused on the use of patient safety newsletters.

The first case study at a large teaching hospital NHS trust dealt with developing a mobile electronic device for clinical risk reporting that included feedback to the person reporting an incident.

The researchers either interviewed or held focus group meetings with 23 staff at the hospital.

They found that almost all the staff reported clinical adverse events with a varying frequency but had different opinions as to how much feedback they received.

The researchers found that immediate feedback would be welcomed and could potentially be supported by e-working technology for both reporting and feedback.

For another case study, the researchers asked all of England and Wales’ NHS trusts for a copy of their patient safety newsletter.

They received 90 responses and after analysing them, they found there was great variation in practice, with few making use of basic design features to make them attractive to readers.

Overall, the case studies showed that although there was enthusiasm for risk reporting, there was scepticism about the importance and relevance of it.

The researchers concluded that the credibility and relevance of the information given in newsletters was crucial in helping to motivate more people to report incidents and to encourage safer practice.

That effort would also be helped by more senior staff endorsing the reporting systems and giving more positive recognition to staff involved in risk reporting and learning activities.
Summary of main findings:

- Risk reporting and feedback systems across different NHS hospitals are highly variable in terms of what they cover and feedback.
- Only a third of NHS trusts give formal acknowledgement of an incident to the person reporting it immediately and around 12% give no feedback to staff from incidents reported.
- No trust gives advice on immediate action that should be taken following an adverse incident.
- All NHS trusts disseminate risk awareness information through newsletters, meetings and training.
- Two thirds of trusts get back at some point to the people who reported adverse incidents to tell them how the issue is being handled.
- A quarter of trusts have no system for monitoring the impact of adverse incidents being reported.
- A third of trusts get no feedback from their strategic health authority/region after they give information on adverse incidents.
- Patients are involved in incident investigations only when these are investigated as complaints.

Conclusions, recommendations and implications for practice and policy:

- Staff need to be encouraged to report incidents and get immediate acknowledgement and thanks when they do to show that reporting is taken seriously and will result in positive change.
- There should be a simplification of the current system of multiple reporting and feedback channels within NHS organisations and external agencies.
- NHS organisations should tailor their safety feedback so it is flexible in content, mode of delivery and suitable for a target audience, to ensure it is absorbed more easily.
- Information fed back to front line staff (in multiple methods) must include examples of changes resulting from the investigation of reported incidents and their impact upon safety, if future reporting is to be encouraged.
- Research should examine how mobile technology can make reporting and feedback easier and more easily targeted on those who need to take action.
- NHS organisations should use normal methods of communication, such as e-mail, handovers between staff and team briefings, as well as newsletters to feedback on safety issues.
- Organisations should audit the effect of feedback and ensure lessons are learnt and seen to be learnt to ensure staff can see that their efforts to improve safety by reporting and investigating incidents actually improves patient safety.

Further information:


The full report, this research summary and details of other Patient Safety Research Portfolio work can be seen at http://www.pcpoh.bham.ac.uk/publichealth/psrp/commissioned.shtml

About the Patient Safety Research Portfolio:

The Patient Safety Research Portfolio (PSRP) was created in 2001 as a programme to promote research into patient safety. It followed a report published by chief medical officer Sir Liam Donaldson in 2000 that looked at learning from adverse events in the NHS. The PSRP is funded by the Policy Research Programme at the Department of Health and reports directly to the CMO. The programme has also commissioned research on behalf of the National Patient Safety Agency (NPSA).

It funds research aimed at reducing errors that lead to bad outcomes for patients by:

- measuring the types and frequency of error
- analysing root causes to identify problems and how lessons can be learned
- specifying and testing interventions
- making sure that useful findings from research are distributed widely across the country

The programme is based at the University of Birmingham’s Department of Public Health and Epidemiology and is directed by Professor Richard Lilford. The PSRP team has a history of building capacity in the area of patient safety and is currently involved in evaluating The Health Foundation’s Safer Patients Initiative and has recently published a series of papers on methods for patient safety research. The views expressed in this publication are those of the authors and not necessarily those of the PSRP, the Department of Health or the NPSA.

For further information about the PSRP visit our website at http://www.pcpoh.bham.ac.uk/publichealth/psrp/ or contact:

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