# How well do NHS trusts react to patient safety alerts?

## 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 the York Health Economics Consortium at University of York and the School of Nursing and Midwifery at Cardiff University, and was led by Karin Lowson, project director at the York Consortium and Annette Lankshear, Reader in health policy at the Cardiff School. The study, first published in 2007, used several methods to study the nature of patient safety alerts, find out how trusts received and implemented them, assessed their impact and recommended improvements. Methods included surveys and interviews of staff at different levels from 41 NHS organisations and an in-depth study of 11 alerts. The study is being highlighted now as part of a new drive to promote 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:

<table>
<thead>
<tr>
<th>Patient safety alerts and their importance are viewed quite differently at different trusts, which do not have a uniform approach in this area</th>
<th>Alerts that require changes in the behaviour of doctors and nurses should be marked for action by both medical directors and directors of nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front-line clinical staff do not always get access to the information about alerts that should be disseminated to all staff, so work is needed on IT provision and education at ward and clinic level</td>
<td>Trusts should review their SABS policies in the light of experience</td>
</tr>
<tr>
<td>Safety Alert Broadcast System (SABS) liaison officers need either to be at, or receive support from, senior level for what is an important and responsible job</td>
<td>How well a trust responds to a safety alert depends on the complexity of the alert and the strategy at that trust.</td>
</tr>
<tr>
<td>Someone with seniority and a clinical background should be involved in all decisions regarding clinical alerts at every trust</td>
<td></td>
</tr>
</tbody>
</table>
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 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 the attempts to reduce errors have been
• implement ways of guaranteeing change in people and organisations.

The Safety Alert Broadcast System (SABS) was set up by the government in 2004 as an electronic system designed to disseminate the patient safety alerts issued to the NHS by various official bodies including the NPSA.

The system requires trusts to feed back to the Department of Health’s patient safety team on the relevance of the alert to them, what action they took, and when that action was completed so that their performance in implementing alerts is monitored.

Aims of the Study:
The study’s main aims were to:

• determine how SABS directives are disseminated and acted upon in trusts
• identify how the SABS system could be improved
• determine whether, and how quickly, a range of alerts were implemented
• identify, in cases of non compliance, what prevented implementation of the requirements of the alert.

About the Study:
The researchers focused on four steps in the process of issuing a safety alert to the NHS – receipt of the alert; disseminating it; implementing it; and monitoring action taken.

They carried out the study in two phases, the first being a high-level study investigating the dissemination and monitoring processes used by NHS trusts as well as the monitoring processes undertaken by strategic health authorities.

The high level study comprised:

• interviews with key stakeholders in bodies that issue safety alerts and the Department of Health
• a survey of SABS liaison officers in acute and primary care trusts
• telephone interviews with those in strategic health authorities responsible for putting alerts into action and monitoring the performance of trusts in respect of SABS.

The second phase involved an in-depth study of 11 alerts by visiting 20 acute trusts, 15 primary care trusts (PCTs), four ambulance and two mental health trusts.

The site visits to trusts comprised structured interviews with staff responsible for disseminating and implementing alerts, and audits to assess how much they implemented.

The researchers also interviewed GPs and practice managers.

Practical findings:

Alerts and action taken
The researchers began their work by analysing the 95 alerts issued between October 2006 and June 2007 from the Medicines and Healthcare products Regulatory Agency (MHRA), the Department of Health’s Estates and Facilities division, the NPSA and the Department itself.

A wide range of subjects was covered in these alerts including safer medication practices; the testing of naso-gastric tubes, colour coding cleaning materials; use of bed rails as ligature points; identification of blood; fixtures, fittings and design; helicopter landing areas; process for dissemination of alerts; medical equipment; and security in medium secure psychiatric units.

The researchers used the SABS system on a particular day at the end of the nine-month period on which they were focusing to determine what progress had been made on the alerts issued during that time. They found significant variations across trusts in their responses to the SABS system and between types of trust, with PCTs seeming to have more trouble in implementing alerts.

Further analysis of 52 alerts, for which trusts should have taken action by the time that the system was being studied, showed that 91% of trusts had recorded that they had completed action or declared that action was not required.
Survey of liaison officers

Every trust has to have a named person as the SABS Liaison Officer (SLO) who receives the electronic alerts, is responsible for passing them on to the most appropriate person and then notifying the Department of Health when the required action is taken.

The researchers carried out an electronic survey of SLOs in the NHS between June and September 2006 and gathered 343 completed questionnaires – a 61% response rate.

The researchers noted the wide variation in level of seniority and authority of some of the SLOs who reported 216 different job titles, mostly related to clinical governance, risk, or health and safety. The officers responding had various backgrounds including 35% who had a clinical background and 34% who were in administration or career management.

Time spent on their SLO role varied amongst the people who responded to the survey ranging from just 2% of their time to more than 25%.

When asked about the dissemination of the alerts in the organisation, 65% of the SLOs said their organisation had a formal policy or procedure for the dissemination of patient safety alerts, 12% said this was in draft format and 22% that there was no formal policy.

The researchers found that SABS liaison officers had some technical problems such as time delays in acknowledging receipt of the alert (up to 20 minutes) and in recording that the alert had been completed (weeks, sometimes).

Nine people also mentioned the sheer number of alerts being a problem, but for most of those who commented (47), the problem was one of poor targeting – a particular issue for people from PCTs and mental health trusts.

Generally, people felt it was easier for the bodies who issued alerts to opt for blanket coverage, but this created more work for SABS liaison officers in trusts and introduced a potential danger that the important alerts would be underestimated because of the number coming in.

Some SLOs (42%) made decisions on the relevance of a safety alert with no independent scrutiny of their decision.

As many as 71% of respondents said they disseminated only those alerts deemed relevant to their organisation, while 28% disseminated all alerts. Those with a clinical background felt that they had an advantage in judging where to send the alerts.

Around a third (32%) of officers said their trust had never audited the implementation of alerts and 11% said such an audit had only happened once. These figures may overestimate the reality given that an audit of alerts may entail only an audit of the SLO records, rather than of a change in practice on the ground.

Visits to trusts for in-depth study

For this part of the study, the researchers chose, randomly, 20 acute trusts, 15 PCTs, four ambulance trusts and two mental health trusts where they interviewed relevant staff about the management, reception, dissemination and implementation of alerts.

They chose 11 ‘tracker alerts’ to study so that evidence could be collected on implementation. These included alerts on protecting people with allergy associated with latex; safe delivery of radiotherapy; alcohol based hand rub; electrically operated beds; and reduction of the risk associated with problems with implantable cardioverter defibrillators.

Interviews with managers

During the visits, the researchers interviewed 91 senior managers including directors of nursing, medical directors, chief pharmacists and clinical governance directors in addition to 33 SLOs.

They found that SABS liaison officers in acute trusts were more likely to be senior managers or be managed by a senior manager than in PCTs, where senior managers tended to have a more ‘hands-off’ approach to alerts. There was also evidence of more direct involvement of senior managers in decision-making and taking action in acute trusts.

The processes for making decisions on the relevance of alerts to the organisation were not always well set out and the researchers expressed concerns that these decisions and those on dissemination were not always adequately scrutinised.

Most organisations had good systems for distributing SABS alerts to managers and to one lead person at ward and clinic level. However, systems for sharing alerts amongst all ward and clinic staff were less well developed.

There was much to recommend the system and 36 (72%) senior managers interviewed believed that the SABS system had advantages over previous systems.

Examples of advantages included:

- a single point of entry to the system
- clearer accountability as the system ensures that trusts have to acknowledge receipt and report action on alerts
- simple formatting of alerts which are mostly more focused and specific
- streamlined and quick electronic delivery system
- ability to set up an organised tracking system within a trust, and internal reliable archives in the trust.

Several improvements to the system were identified by people interviewed, including better targeting of alerts; using more appropriate language in the alerts; clearer and more concise alerts; alerts from several sources now coming through one system; and more appropriate grading of alerts to risk and importance.
Overall, the researchers found that implementation of the 'tracker alerts' was mixed and how effectively they were implemented depended on how complex the alert was and strategy at a particular trust.

**Interviews with front-line staff**
The researchers also visited up to 10 wards in each trust relevant to the specified alerts being studied to carry out interviews with one front-line member of staff in each area (usually a ward sister or nurse in charge).

In all, 393 interviews took place with a range of key staff at the acute trusts, including 170 ward interviews and audits. In PCTs, 171 face to face interviews and 95 telephone interviews took place, while at the ambulance and mental health trusts, there were 32 and 29 interviews, respectively.

They also audited the availability of policy documents and collected evidence of implementation of alerts from an audit of equipment (such as latex products and mobile food trolleys) and documentation.

Overall, the researchers found that although some action had been taken in all acute and mental health trusts for all of the alerts, not all ward managers interviewed were aware of the recommended action in respect of Latex allergy or the testing of nasogastric tubes.

PCTs, many of which had been subject to merger, were less likely to have taken appropriate action.

**Primary Care**
From interviews with SABS liaison officers, managers in PCTs, and general practice managers, the researchers found that alerts were distributed to independent contractors such as GPs and dentists, by e-mail, fax or hard copy in the post.

Of the general practice managers and managers in PCTs interviewed, only 22% said their GP practices thought the alerts were mostly helpful, while 57% said they were mostly irrelevant.

**Interviews with strategic health authority managers**
The researchers also carried out telephone interviews with 15 people from nine out of the 10 strategic health authorities in England. These people had responsibility for SABS in their organisation.

Most of the people from strategic health authorities spoke about the inaccuracy of the data on the SABS webpage reports, with data being different in trust reports to health authority reports.

Thirteen of these people said they monitored the performance of trusts and PCTs including monitoring of action underway and action completed. Nine monitored outstanding alerts, varying from daily and weekly through to annually, but only four produced reports to be submitted to their board.

Overall, most people commenting thought SABS was useful for helping strategic health authorities to monitor trusts' performance, depending on how actively involved the SABS lead person was.
Summary of main findings:

- There were significant variations across trusts in their responses to the SABS system and between types of trust
- More than a fifth (22%) of organisations do not have a formal policy or procedure for managing patient safety alerts
- Awareness of the requirements of particular alerts is patchy amongst front-line staff at NHS organisations
- Around 10% of trusts are failing to take action on alerts by the called-for deadline time
- Just over a quarter (28%) of SABS liaison officers disseminate all alerts sent to them and 71% disseminate only those alerts deemed relevant to their organisation
- Around a third (32%) of SABS officers said their trust had never audited the implementation of alerts
- Most NHS organisations have good systems for distributing safety alerts to managers and lead clinicians but systems for ensuring alerts are read by all ward, clinic and ambulance staff are unaudited and inadequate.

Conclusions, recommendations and implications for practice and policy:

- Some SABS liaison officers have a relatively low level of seniority/authority and trusts should ensure these officers have authority or immediate access to senior managers
- Alerts should be targeted better
- Terminology in alerts should be familiar to NHS staff and more concise versions should be developed for GPs and front line staff
- There should be more appropriate grading of alerts for risk and importance and each trust should develop a systematic strategy for assessing their impact
- There should be sequential numbering of alerts rather than numbering for each type (alert, safer practice notice etc)
- Systems to assess the relevance of alerts with properly assigned responsibility should be tightened at trusts with someone with a clinical background involved in decisions
- Each trust should take prompt action to ensure alerts are fully implemented before signing them off on the SABS website.

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:

Patient Safety Research Portfolio
School of Health and Population Sciences
Unit of Public Health, Epidemiology & Biostatistics
University of Birmingham
Edgbaston
Birmingham B15 2TT
Tel: +44 (0) 121 414 2634
Fax: +44 (0) 121 414 6216
Email: n.c.maillard@bham.ac.uk

PS046: A multi-method study of the uptake of advice, directives and guidelines to the NHS concerning patient safety by the Safety Alert Broadcast System