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## UPDATE

# IMPROVING RESPONSE TO SIGNS OF PATIENT DETERIORATION

A new report from the National Patient Safety Agency aims to help nurses recognise and respond to patient deterioration to prevent serious incidents. Nerys Hairon reports

The National Patient Safety Agency has published a report that gives practical help to NHS staff on how to recognise the signs of patient deterioration and act on them (NPSA, 2007a).

The agency first highlighted the issue of patient deterioration in July this year, in a report on learning from serious incidents (NPSA, 2007b). This included a detailed analysis of 576 deaths reported to the agency's national reporting and learning system (NRLS) over a one-year period. The analysis found that more than 11% of these deaths related to patient deterioration that was not recognised or not acted on. The NPSA pledged to carry out further work to explore the issue and identify contributing factors.

The agency says its latest report should be used in conjunction with NICE guidance on recognition and response to acute illness in hospitalised adults, which was also published in July this year (NICE, 2007).

The new NPSA report also includes a checklist of questions for trusts, a toolkit, links to a variety of resources and good practice examples to inform local action on preventing patient deterioration.

## MAIN FINDINGS

The NPSA commissioned a programme of work to identify the underlying causal and contributory factors in deterioration incidents and to explore how these factors interrelate.

This work involved semi-structured interviews with clinicians, aggregate root cause analysis, ethnographic analysis, a literature review and focus groups with doctors and nurses (NPSA, 2007a).

The contributing and causal factors were found to be complex and a wide range of factors contribute to the problem. These include: challenges in prioritising competing demands; a lack of effective teamworking and leadership; verbal and written communication breakdown; insufficient training to understand the relevance of observations; and a lack of successful implementation of policies and procedures.

The report examines these issues in detail and presents them as nine main factors:

- Communication factors;
- Working conditions and environmental factors;
- Task factors;
- Education and training factors;
- Patient factors;

- Team and social factors;
- Organisational factors;
- Equipment and resources factors;
- Individual factors.

## Communication factors

**Verbal communication.** The NPSA states that communication problems were identified in all reports reviewed in this study and are, according to the aggregate root cause analysis report, the biggest problem area within deterioration incidents.

It was suggested that staff may not adequately inform each other regarding patients' care. Problems occur in particular during handovers and transfers because the amount of information handed over is difficult to remember and less easily understood by inexperienced staff.

In addition, communication between medical and nursing staff is problematic. Nurses may not communicate clearly enough and struggle to convey information in a manner that would convince doctors of the urgency of the situation. The report suggests that nurses may be sensitive to the availability of doctors and reluctant to 'lose face' or cause unnecessary extra work.

#### REFERENCES

**National Patient Safety Agency (2007a)**  
*Recognising and Responding Appropriately to Early Signs of Deterioration in Hospitalised Patients.*  
London: NPSA. [www.npsa.nhs.uk](http://www.npsa.nhs.uk)

**National Patient Safety Agency (2007b)**  
*Safer Care for the Acutely Ill Patient: Learning from Serious Incidents.*  
London: NPSA.

**NICE (2007)** *Acutely Ill Patients in Hospital: Recognition of and Response to Acute Illness in Adults in Hospital.*  
London: NICE. [www.nice.org.uk](http://www.nice.org.uk)



**Written communication.** Incomplete and inadequate documentation were identified as contributing factors. The report says that observation and fluid charts may not always be completed – when observations are taken, the initials of staff and instructions may be missing or difficult to read. In addition, decisions or medical orders may not always be documented in patients' notes, or there may be discrepancies between what was documented and what actually happened.

#### Working conditions and environmental factors

Working conditions were identified as contributing to the problem of deterioration not being recognised or acted on.

The report states that staffing levels are particularly difficult to maintain when staff accompany patients to other departments, are on a break or are on sick leave. As a result, nurses do not have adequate time to satisfactorily care for the number of patients in the ward, teach newly qualified staff, take breaks or attend ward rounds.

The interviews indicated that staff rarely carry out routine observations during the night (between 10.30pm–6am) and this means that none are taken for approximately eight hours. Nurses in the focus groups reported that teams are often dominated by junior and agency staff.

The inadequate staffing levels, together

with the high workload, create time pressure, and the report says that nursing and medical staff have difficulties in prioritising their workload.

Nurses described how such conditions have created a working culture where it is acceptable not to read policies or procedures, and where a low morale on the wards and a lack of respect for colleagues and patients are common. The report states that the influence of the ward culture can mean that standards learnt in training are not maintained.

In relation to environmental factors, the analysis found that noise levels of wards may be high, which makes it difficult to hear orders or requests from other staff. It was also found that it could be difficult to monitor patients in side rooms adequately because nurses' view of them was obscured.

#### Task factors

Study participants said that observations are seen as having a low priority – they are perceived as simple tasks that can be ticked off the list and that need to be carried out as quickly as possible. Staff may become complacent about routine observations, simply because they are routine and patients are not expected to become unwell.

The analysis found that the frequency of patient observations is not reviewed, and patients stay at the frequency to which they were first assigned.

The report adds that in some clinical areas observations are more frequently completed than in others.

When early warning scoring systems are in place, observations are taken but the overall scores are sometimes not completed or are calculated incorrectly. Similarly,

respiratory rates are often not recorded.

For a detailed analysis of the other contributory factors, see [www.npsa.nhs.uk](http://www.npsa.nhs.uk).

#### IMPROVING PRACTICE

The NPSA states that its findings indicate that consistently and effectively detecting and acting on patient deterioration is a complex issue.

The report identifies a series of points where the process can fail, including: not taking observations; not recognising early signs of deterioration; not communicating observations causing concern; and not responding to these appropriately. These are outlined in full in the box below.

The research revealed that the underlying causes were also complex and discusses these further. Staffing and workload issues were identified as a key underlying cause.

These related not only to lack of time to carry out observations or follow up patients with signs of deterioration but also meant staff were less able to spend time with patients. Staff reported that this makes it more difficult for them to carry out visual observations, or to be certain of the significance of observations in the context of the patient's previous history. For a full discussion of the other underlying causes, see [www.npsa.nhs.uk](http://www.npsa.nhs.uk).

The NPSA recommends that every acute trust should establish a multidisciplinary 'deterioration recognition group' to lead and coordinate efforts to improve the safety of patients who are vulnerable to unexpected deterioration. It adds that to be effective this group would need to measure baselines and monitor improvements following interventions. The report includes a checklist of reflective questions based on the findings, as well as a toolkit. ■

#### POINTS WHERE THE PROCESS CAN FAIL

- Not taking formal observations, such as temperature, pulse, BP, oxygen saturation, respirations.
- Not making basic visual observations, for example of colour or consciousness.
- Taking incomplete observations, especially omitting respiratory rate.
- Calculating early warning scores incorrectly.
- Not recording observations.
- Not recognising when observations

should be considered a cause for concern.

- Not communicating previous observations and clinical history at staff handover.
- Not communicating previous observations and clinical history at transfer between wards or departments.
- Not effectively communicating concern to other staff.
- Staff who receive the communication not responding with appropriate urgency.