Implementing quality care indicators and presenting results to engage frontline staff

This article describes the implementation of seven quality care indicators – or metrics – and the way data was presented to frontline staff.

INTRODUCTION

In an organisation as large as the NHS, the links between clinical practice and patient outcomes are often distant and rarely direct. The use of basic performance indicators and targets that identify so-called ‘good’ and ‘bad’ hospitals has been criticised as being simplistic and unlikely to lead to clinical change and better outcomes.

NHS practitioners have not always been engaged by targets and other indicators used to manage and assess performance. In some cases, they were unaware of the targets being measured or what indicators contribute to performance ratings, which means that they are unlikely to use them to help improve the quality of their services.

In response to these issues, a suite of care indicators, or metrics, were developed. These evidence-based measures of care can be used to benchmark, monitor and improve clinical outcomes and patient experiences. They have been subsequently supported by NHS North West, successfully piloted in a number of organisations and built upon from both an evidence base as discussed below and by different specialty mix.

THE INDICATORS

Following a review of all clinical records and assessment processes, the indicator topics were selected because they were common to most trusts, had associated national guidance and/or had emerged from patient complaints. Seven care indicators were chosen. These were:

- Falls assessment;
- Food and nutrition;
- Pressure area care;
- Pain management;
- Patient observations;
- Infection prevention and control;
- Medicine prescribing and administration.

The indicators are discussed in turn below, and the key issues to be considered in relation to each are listed.

Falls assessment

Falls are the most common patient safety incident reported to the National Patient Safety Agency’s (NPSPA) National Reporting and Learning System (NRLS). In an average 800-bed acute trust, there will be around 24 falls every week, which equates to around 1,250 a year. Associated healthcare costs are estimated at a minimum of £92,000 per year for the average acute trust (Healy and Scobie, 2007).

Key issues:

- Patient safety and lifestyle;
- Reduced length of stay and cost;
- Falls reduction strategies.

Food and nutrition

Chronic poor nutrition leads to deficiencies in immune function, wound healing, organ function, mental state and growth.

The presence of disease can lead to inadequate nutrition by reducing digestion and absorption, altering metabolism and reducing appetite and therefore food intake.

Long-term enteral and parenteral nutrition are life-saving therapies for some patients but many who would benefit from this and other nutritional support are simply not receiving it (Kelly et al, 2001).

Effective nutritional management requires systematic patient assessment on admission, at scheduled intervals, in response to changes in a patient’s condition and before discharge. Dietary intake should be regarded as a vital sign and recorded as regularly as other vital signs, such as pulse and blood pressure.

Key issues:

- Multidisciplinary team approach;
- Staff competency to implement care plans for effective nutritional management;
- Evaluation and care planning.

Pressure area care

The primary cause of pressure ulcers is unrelieved pressure to the skin, while secondary causes include exposure to cold or skin abrasion. Contributing factors include poor nutrition, weight loss and diabetes (Butcher, 2005).

These wounds have been estimated to cost the NHS £1.4bn–£2.1bn a year (Bennett et al, 2005).
2004) and this cost may be added to by litigation. These wounds are slow to heal and are associated with significant morbidity. Pressure ulcers affect quality of life and can contribute to cause of death.

Key issues:
- Decreased risk of infection;
- Decreased pain;
- Decrease in length of stay.

**Pain management**

Most inpatients will experience some degree of pain during their stay in hospital. In addition to the obvious discomfort for the patient, poor pain management can result in delayed wound healing, extended hospital stay and chronic pain syndromes (Bonnet and Marret, 2005).

Effective acute pain management requires systematic patient assessment on admission, at scheduled intervals, in response to new pain and before discharge. Pain intensity should be regarded as a vital sign and recorded as regularly as other vital signs, such as pulse and blood pressure.

Key issues:
- Excellent pain assessment;
- Enhanced patient satisfaction outcomes;
- Reduced length of stay.

**Patient observations**

The primary role of monitoring patient observations is to make clinicians aware of the deteriorating patient. The National Confidential Enquiry into Patient Outcomes and Death has found the patients who did not survive had often shown signs of deterioration long before they died (Cullinane et al, 2005).

Abnormal physiological values are often charted without action in the hours preceding an in-hospital cardiopulmonary arrest and up to 24 hours before ward patients are admitted to intensive care.

The enquiry recommended that hospitals should pay more attention to physiological signs of decline, put in place ‘track and trigger’ systems for all patients and link these to a response team skilled in managing acute clinical problems.

Key issues:
- Failure to measure basic observations of vital signs;
- Lack of recognition of the importance of worsening vital signs;
- Delay in responding to deteriorating vital signs.

**Infection prevention and control**

Healthcare-associated infections have a high profile nationally and locally. Directives on reducing HCAI rates consistently guide healthcare providers towards developing cultures that embed infection prevention and control into all aspects of clinical care.

Key issues:
- Patient experience, including safety and comfort, and awareness of infection status;
- Early identification and management of known or suspected infections;
- Reducing transmission risk;
- Surveillance, analysis of potential acquisition and incident reporting;
- Promoting an organisational culture that recognises the significance of infection prevention and control and responds to the challenges with a focus on both a strategic and clinical aspects.

**Medicine prescribing and administration**

Medication errors tend to fall into three categories: prescribing; dispensing; and administering. All healthcare staff need to find ways to reduce the frequency of these errors.

Medication errors are the second largest category of error after slips, trips and falls reported to the NPSA’s NRLS. Approximately 5,000 medication safety incidents are reported to the NRLS every month.

Key issues:
- Patient safety;
- Incident reporting;
- Open and fair culture.

Other categories are equally important and, as confidence grew, further indicators were introduced, often based around patient safety guidance – for example patient identification and control drug management. This resulted in a bank of over 20 indicators that complemented recommendations from national bodies, including the NPSA.
COMMUNICATING PERFORMANCE DATA

Every month, trust boards are presented with trust-wide performance indicators as part of the drive to maintain performance and demonstrate care delivery standards.

It is vital that care indicators and the data generated by them are ‘owned’ and understood by staff at all levels, not only to raise awareness but also to help and support them to improve their own areas.

The recent National Nursing Research Unit report *State of the Art Metrics for Nursing* recognises that nurses ‘must have responsibility for actions that lead to outcome in terms of legitimate authority, self-perception and sphere of practice’. It also states: ‘There must be sufficient knowledge to inform remedial action’ (Maben and Griffiths, 2008).

Frontline staff are genuinely interested in clinically governed care, but need governance-related data to be presented in a meaningful and comprehensible way. By holding up a mirror to wards and departments, we enabled them to see what was and was not working well and to identify support needed to make improvements.

Presenting data based on the care indicators as a list of numbers might not be the best way to communicate performance, and the gaps in performance to individual practitioners. We therefore decided to present the data in the form of spidergraphs – a visual reporting tool (Fig 1, p13). Also known as radar charts, these illustrate the gaps between current and desired performance with the aim of showing at a glance how each specialty/ward was performing against a range of care indicators.

Bar charts showed performance against single indicators over time (Fig 2).

**Outcomes**

As the support and involvement of staff at all levels grew, so did confidence. This led to better compliance with the indicators. Further indicators could then be developed.

With the addition of support measures around indicators, for example supportive falls plans or campaigns to reduce HCAs, positive results emerged. These included over 90% compliance with risk assessments, a reduction in reported falls of 26%, and compliance with the monitoring and management of infection prevention and control hygiene measures which helped in the achievement of MRSA and *C. difficile* markers.

**Conclusion**

Our experience in developing, implementing and encouraging the ownership and adoption of indicators by practitioners has been a highly positive experience in fostering the drive to improve and maintain quality.

In particular, we feel the delivery of data in a purely visual, easily understandable form has been a key part of this success. The recent publication of more than 200 new indicators – a key outcome of Lord Darzi’s report *High Quality Care for All* – will make the dissemination of indicator data more vital than ever in our attempts to measure the quality and benchmark our work against our peers (Department of Health, 2008).

**References**


