

Making the most of the Manchester Patient Safety Framework tool

Michael Weaver, head of corporate governance and risk management, Bromley Hospitals NHS Trust

How useful is the Manchester Patient Safety Framework (MaPSaF) tool for healthcare organisations? Michael Weaver describes its use at his organisation and provides a critique.

There is little literature available about the use in practice of the Manchester Patient Safety Framework (MaPSaF) tool, which was launched in 2006 to help healthcare teams and organisations assess their progress in developing a mature safety culture. Bromley Hospitals NHS Trust has used the tool to aid compliance with safety standards and to research whether higher incident reporting rates were associated with perception of a safety-conscious culture.

The research found no clear relationship between rates of adverse event reporting and people's perception of patient safety culture. Participant feedback showed a lack of knowledge, insight and understanding of the trust's incident reporting system, and concern with not receiving timely feedback when incidents were reported. Use of a revised, more succinct version of the tool in carefully composed workshops might help NHS trusts to elicit valuable information about patient safety from staff.

The MaPSaF concept

MaPSaF¹ was launched by the National Patient Safety Agency (NPSA) in 2006, aiming to make the concept of a 'safety culture' more accessible and to help organisations and teams to assess their progress in developing a mature safety culture. The NPSA considered the uses for MaPSaF to be as follows:

- to raise awareness of and stimulate discussion on patient safety;
- to promote recognition that patient safety is a complex multidimensional concept;
- to profile relative strengths and weaknesses in safety culture;
- to provide an indication of what a more mature patient safety culture would be like;
- to highlight differences in perceptions across professional groups and teams; and
- to help evaluate any specific intervention to change the safety culture of the organisation.

It is not intended to be a performance management tool. Bromley Hospitals NHS Trust decided to pilot the use of the MaPSaF tool to aid self-assessment of its progress towards compliance with the developmental safety standard D1 in the Department of Health's *Standards for Better Health*, and also to support research into the relationship between rates of adverse event reporting and staff perception of an organisation's patient safety culture.

Method

Three workshops were held with staff from three different specialty areas, using a facilitator who was not employed by the trust, as

recommended by the local research ethics committee (LERC). Workshops were scheduled to last one and a half hours.

Staff attending came from two specialties (A and C) with higher rates of adverse incident reporting and one specialty (B) with a lower rate of adverse incident reporting. The trust's risk management information database showed that specialty A had reported 131 incidents to the NPSA between April 2005 and March 2006 (5% of all incidents reported by the trust to the NPSA during this time) and specialty C had reported 496 incidents over the same period (19% of all trust reports to the NPSA). However, specialty B had reported only one incident in this period. Of the 25 participants who attended three workshops, one (4%) was employed in general management, 16 (64%) were registered nurses and eight (32%) were employed as midwives. In terms of employment status, all were on a permanent contract.

Each workshop participant received a set of statements drawn from the 10 patient safety dimensions outlined in the MaPSaF tool for acute trusts² (see box 1) and a copy of the standard workshop presentation provided by the NPSA and University of Manchester.

For each patient safety dimension, participants were given the choice of five possible descriptions representing five levels of patient safety maturity, as outlined in the MaPSaF tool (see box 2). It is not possible to list all the statements here, but examples of statements across dimension², "Priority given to safety" were:

1. A low priority is given to safety.
2. Safety becomes a priority once an incident occurs, but the rest of the time only lip service is paid to the issue apart from meeting legal requirements.
3. Safety has a fairly high priority and there are numerous

BOX 1: THE 10 DIMENSIONS

- 1 Commitment to overall continuous improvement
- 2 Priority given to safety
- 3 System errors and individual responsibility
- 4 Recording incidents and best practice
- 5 Evaluating incidents and best practice
- 6 Learning and effecting change
- 7 Communication about safety issues
- 8 Personnel management and safety issues
- 9 Staff education and training
- 10 Team working.

systems (including those integrating the patient perspective) in place to protect it.

4. Safety is promoted throughout the organisation and staff are actively involved in all safety issues and processes.
5. Safety is the top priority in the organisation, and responsibility for safety is seen as being part of everyone's role including patients and the public.

For each patient safety dimension, participants were asked to vote for one of the five levels, utilising a wireless keypad linked to an electronic audience response system. The system recorded each response and displayed the results of each vote via a video projector.

Participants were asked to respond individually (without conferring with other team members), pressing any number from one to five that corresponded to the description that they felt best described the level of patient safety culture in their team or department. If participants could not decide between two descriptions, they were advised to choose the one they thought best described their team. Participants were advised that there was no right or wrong answer and that the framework was designed to explore perceptions of safety culture and to facilitate discussion between healthcare staff about these perceptions. In addition, they were informed that it was also the purpose of the study to critique the MaPSaF tool and to agree upon how it could be improved or altered to better determine patient safety culture. To conclude discussion after each safety dimension, the group was asked to consider the emerging profile of the team, identify what action the team should take to improve its patient safety culture and what action the trust should take to support the team in doing this.

Results

Perceptions and reporting

Feedback from the independent facilitator suggested that responses received by participants were at times influenced by their interpretation of the statements described in the MaPSaF tool and not necessarily their perception of patient safety culture. The independent facilitator reported that on several occasions individuals selected a lower level of patient safety maturity, as they disagreed with some words used in a statement describing a higher level – particularly a reference to “anonymous” incident reporting used in dimension 4. On several occasions the independent facilitator considered that participants would have scored higher had it not been for this word.

The independent facilitator reported that during voting on dimension 2, scores appeared to be high indicating a high priority for patient safety. However, when participants discussed how they had voted, they referred to a number of incidents where a lower priority was given to patient safety.

In Group A participants were concerned that although there were physical controls and systems in place to control and manage patient safety, there were occasions when patient safety was potentially compromised when bed capacity was increased by utilising areas not specifically designed as ward areas. When asked to identify actions for the team and the trust, participants felt there needed to be greater recognition of the clinical concerns raised when decisions are taken to increase bed capacity. The group that had reported the fewest incidents, Group B, focused much discussion on not being able to attend meetings due to continuing staff shortages and workload pressures. Many participants found it difficult to find sufficient protected time to receive appraisals,

BOX 2: THE FIVE LEVELS OF PATIENT SAFETY CULTURE

Level 1 (pathological)

Why do we need to waste our time on patient safety issues?

Level 2 (reactive)

We take patient safety seriously and do something when we have an incident.

Level 3 (bureaucratic)

We have systems in place to manage patient safety.

Level 4 (proactive)

We are always on the alert/thinking about patient safety issues that might emerge.

Level 5 (generative)

Managing patient safety is an integral part of everything we do.

and hear what action had been taken in response to clinical audit work or adverse events that had been reported.

Feedback from all groups highlighted that lack of feedback on action taken in response to incidents continued to be a concern for staff. This has been demonstrated in the literature – for example *Building a Safer NHS*³ said that a lack of timely feedback and/or corrective action following a report was a key barrier to incident reporting, and a study by Vincent *et al*⁶ recommended that feedback and reassurance to staff about the nature and purpose of incident reporting systems would help to improve levels of reporting.

Overall, the workshops showed that there is an evident lack of knowledge, insight and understanding of staff utilising the trust incident reporting system and receiving timely feedback. No reliable evidence was uncovered indicating that staff who report adverse incidents do so because they perceive they are working in an organisation that has developed a safety-conscious culture.

Composition of workshops

The decision to use an independent facilitator was contrary to NPSA advice, which says that external professional facilitators are unnecessary. It was the decision of the LREC that, given the possibility that participants in the study may wish to discuss or confess incidents that they had witnessed but not reported, there was a potential conflict of interest should discussion involve a risk manager in the trust.

Written feedback received from the independent facilitator after the workshops reported concerns that some participants in one workshop were not comfortable with contributing to or participating in discussion with other members of the group. This was demonstrated by long periods of silence where the facilitator found it difficult to elicit comment. The more senior members of the group made the majority of contributions to discussion.

When viewing the results of self-assessment on personnel management and safety issues, the facilitator asked members of the workshop to discuss why there appeared to be a significant difference in perception of levels of patient safety culture. The group responded by suggesting that this was a personal question, and some participants began to question why they had been selected to participate in the study and whether there was an ulterior motive to the session.

When conducting a focus group study there is merit in bringing together a diverse group (for example a range of professions) to maximise exploration of different perspectives within a group setting. However, the impact of hierarchy within the group may affect the data that is collected⁵. The feedback from the independent facilitator suggested that in one of the three main study workshops there was a perceived hierarchy within the group that may not have been apparent in the other two workshops. There may be merit in considering future workshops that are attended by staff of equal grade and employment to minimise the potential for participants feeling inhibited by the attendance of more senior staff.

Critique of the tool

When reading the statements for each of the 10 dimensions, participants commented that they wanted to select sections of statements from different levels represented within the tool. At times participants found it difficult to see how the statements demonstrated an improvement in patient safety maturity across the five levels of the MaPSaF tool. There was also comment that the statements needed to be more succinct and focused so removing the possibility of ambiguity. This observation may reflect the choice of MaPSaF statements for the workshops. Because of time constraints not all statements could be included and if they had been, participants may have found it easier to select the level of patient safety maturity that they agreed with.

Despite advice to record their agreement with the description that fitted with their team and not the organisation, some participants still found it difficult to differentiate between their perception of patient safety culture in their team and the organisation. This may reflect why the NPSA suggests that participants consider organisational safety culture and team safety culture separately.

The advantage of using the keypads was that respondents were able to anonymously record their agreement with a statement and immediately see all other responses. This enabled the facilitator to discuss with the whole group the results recorded and the possible reasons why some participants may have voted the way they did. The NPSA considers there will probably be differences between staff groups and suggests the group discuss possible reasons for this. However, the concerns raised by the facilitator as described above show that there is still the risk that people will be unwilling to share their comments in a group that may contain more senior staff.

Making the tool more succinct

Whilst the NPSA has endorsed MaPSaF to help healthcare organisations reflect on their progress in developing a patient safety culture, as far as the author was able to determine there was no evidence within published peer reviewed journals that the MaPSaF has been validated as a tool to measure patient safety culture.

Measuring safety climate in health care helps to diagnose the underlying safety culture of an organisation or work unit, but a high standard of measurement is needed so that healthcare managers can use the resulting data to design effective safety management systems and interventions⁶.

Data obtained from the workshops was analysed using factor analysis, which takes a large set of variables and looks for a way that the data may be reduced or summarised using a smaller set of factors or components⁷. The results of this analysis indicated the presence of three factors that accounted for 59.7% of all the responses given by participants.

Factor one spanned five of the dimensions (numbers 2, 4, 5, 6 and 7) in the MaPSaF tool and accounted for 29.4% of all the

responses given by participants. This factor, titled “Patient safety management”, accounts for how incidents are reported, recorded, investigated and the subsequent lessons are communicated and learnt.

Factor two covered three of the dimensions (numbers 8, 9 and 10) and accounted for 18.2% of all the responses given by participants. This factor, titled, “Staff support and development”, accounts for how staff work as a team, receive education and training and support from personnel.

Factor three encompassed four of the dimensions (numbers 1, 6, 7, and 10), and accounted for 12.1%, of all the responses given by participants. This factor, titled, “Quality improvement”, accounts for how staff work together as a team to communicate safety issues to ensure changes are made so that lessons are learnt and improvements in quality occur.

In the absence of evidence within published peer-reviewed journals, the author is unable to determine the exact theoretical underpinning of the MaPSaF tool and can only rely on the explanation given in the published NPSA guidance that describes how the MaPSaF tool was developed. Whilst accepting the limitations of this study design and the small sample upon which the factor analysis was performed, there is evidence to suggest scope for revising the MaPSaF tool to include fewer patient safety dimensions. This might create a more succinct tool that would more accurately reflect perception of patient safety culture and how it may change across the five levels of maturity.

Conclusion

It is clear that there is still some way to go in developing a patient safety culture in the NHS, including the development of staff's understanding of incident reporting systems and the provision of timely feedback to staff following incidents. The MaPSaF tool can be helpful to NHS trusts in their patient safety journey and will help to meet the requirements of the developmental safety standard in *Standards for Better Health* – its use in Bromley Hospital did inform the development of a subsequent patient safety strategy. However, it perhaps needs revision with the 10 dimensions reduced to three or four covering patient safety management, staff support and development, quality improvement and systems errors. Careful thought must also be given to the way it is used with groups of staff in order not to inhibit their contributions. HCRR

References

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