

# Measuring and Benchmarking Safety Culture: Application of the Safety Attitudes Questionnaire to an Acute Medical Admissions Unit

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## Background

While new patient safety initiatives are continually being developed, there are few tools available to measure the effect of interventions on outcomes [1]. In common with many healthcare institutions, in St James's Hospital we trend the number and types of errors reported as an indicator of patient safety. However, this indicator is limited in its usefulness, as only a fraction (10-20%) of the errors which occur are known to be submitted to reporting systems; therefore reporting rates cannot be considered to be indicative of occurrence rates [2]. The limitations of reporting systems has prompted a search for an alternative means of tracking patient safety in hospitals. Techniques such as chart review and observational studies, although highly effective at detecting additional incidents, are labour-intensive and therefore difficult to sustain on an ongoing basis [3].

In contrast, the measurement of safety culture is inexpensive, sustainable and has the inherent value of being a 'leading' rather than a 'lagging' indicator of safety [4]. The most commonly used and rigorously validated tool to measure safety culture is the Safety Attitudes Questionnaire (SAQ) [5]. Unlike other safety culture scales, higher scores on the SAQ have been associated with positive patient and staff outcome data [5].

## Objective

To assess the safety culture in an acute medical admissions unit (AMAU) of a teaching hospital in order to benchmark results against international data and guide a unit-based, integrated, risk management strategy.

## Methods

**Tools:** All healthcare staff on the AMAU with direct patient contact were surveyed (n=92) - doctors, nurses, healthcare assistants (HCAs) and allied healthcare professionals (AHPs) using a combination of online and manual administration methods.

**Timeframe:** 3 weeks in June 2008

**Key Steps:** The SAQ was adapted to suit the Irish healthcare setting using some simple translations of terminology. Briefing sessions were held with key stakeholders the different healthcare groups to explain the background and aims of the survey. The SAQ was applied to assess safety culture across six domains: 'teamwork climate', 'safety climate'; 'perceptions of management', 'job satisfaction', 'working conditions' and 'stress recognition'[2]. Safety attitude scores were calculated for the overall unit and for individual caregiver types.

## Results

Although previous use of the SAQ had focused on the significance of the data solely in terms of patient safety, we considered the SAQ to be equally relevant to employee and environmental safety and therefore chose to interpret the results of the SAQ from a holistic risk perspective.

When compared against an international benchmark, the AMAU scored significantly higher for four of the six safety domains:  $p < 0.01$  for 'teamwork climate', 'safety climate' and 'stress recognition' and  $p < 0.05$  for 'job satisfaction'.

The difference between nurse manager scores and the overall mean for the study group was statistically significant for the domains of 'teamwork climate' ( $p < 0.05$ ) and 'safety climate' ( $p < 0.01$ ). HCAs scored significantly lower relative to staff overall with regard to 'working conditions' ( $p < 0.05$ ) and 'perceptions of management' ( $p < 0.01$ ). Substantial discrepancies in the perception of teamwork were found to exist between staff groups on the AMAU.

**Conclusions:** Although the SAQ has been implemented in multiple hospital environments, to our knowledge this is the first application of the SAQ to an AMAU setting and its first use in an Irish healthcare organisation. Results gave a valuable insight into staff issues of concern across the safety spectrum: employee and environmental safety, clinical risk management and medication safety. Under Irish legislation (Safety, Health and Welfare at Work Act 2005) employers are obliged to establish safety teams to identify and manage workplace risks. We now plan to pilot an integrated approach to safety on the AMAU by establishing a unit-based safety team to address the safety issues identified by the SAQ.

## References

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