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Safety Culture Assessment in Health Care: A review of the literature on safety culture assessment modes

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Preface

This preface was written by the Australian Commission on Safety and Quality in Health Care (the Commission) to provide context and background to the report which follows, *Safety Culture Assessment in Health Care: A review of the literature on safety culture assessment tools*. The Commission contracted Macquarie University to prepare the literature review, as part of the review of the Australian Health Service Safety and Quality Accreditation (AHSSQA) Scheme.

Background

The Commission's role is to lead and coordinate national improvements in the safety and quality of health care. The Commission works in partnership with the Australian Government, state and territory governments and the private sector to achieve a safe and high-quality, sustainable health system. In doing so, the Commission also works closely with patients, carers, clinicians, managers, policymakers and healthcare organisations.

The Commission developed the National Safety and Quality Health Service (NSQHS) Standards in consultation with the Australian Government, state and territory governments, technical experts and stakeholders. They aim to protect the public from harm and to improve the quality of health service provision.

To become accredited, health service organisations must pass assessments to show they have implemented the NSQHS Standards. The assessments are conducted by independent accrediting agencies, approved by the Commission, as part of the AHSSQA Scheme. However, state and territory regulators and chief executives of health service organisations have raised concerns about several aspects of the accreditation process.

The Commission is undertaking a review to update and improve the accreditation process. In May 2017, the Commission contracted four literature reviews to provide an evidence base to inform the Commission's review of the AHSSQA Scheme. The reviews explored the potential use of the following methods to improve the veracity of health service organisations:

- Attestation by a governing body
- Short-notice and unannounced surveys
- Patient journey and tracer methodologies
- Safety culture assessment.

The report that follows this preface presents the findings of a literature review that explored tools which assess safety culture in health service organisations. The review particularly sought to identify whether a tool was available that would be suitable for large-scale implementation as part of accreditation processes under the AHSSQA Scheme.

Key findings

The key findings of the report on safety culture assessment tools are discussed according to an evaluation of effectiveness and utility of available tools, and considerations for a safety culture assessment tool as part of the AHSSQA Scheme.

Evaluation of available tools

The authors of the report reviewed the available tools that measure safety culture according to their frequency of citation; validity; adaptability for multiple settings; accessibility and cost; the underlying constructs measured; and whether training was required to administer the tool and analyse the results. The report also discusses whether the identified tools were suitable for large-scale implementation during the process of accreditation.

The tools that were considered potentially suitable for use during accreditation were:

- Safety, Communication, Operational Reliability and Engagement survey (SCORE)
- Safety Attitudes Questionnaire (SAQ)
- Victorian Safety Climate Survey (VSCS)
- Safety Climate Survey (SCSu)
- Safety Climate Scale (SCSc)
- Patient Safety Climate in Healthcare Organisations survey (PSCHO)
- Modified Stanford Instrument (MSI)
- Hospital Survey on Patient Safety Culture survey (HSOPSC)
- Manchester Patient Safety Framework (MaPSaF).

The majority of the safety culture tools that were short-listed used quantitative self-report measures, with one tool (the MaPSaF) using qualitative measures to capture participant viewpoints.

No single tool was considered to adequately assess all major dimensions of safety culture. It was not recommended therefore that any of the short-listed tools would be appropriate for large scale implementation as part of accreditation of health service organisations.

The authors also consulted with a small sample of hospitals to explore current safety culture assessment practices. They found that health service organisations use a variety of methods to evaluate safety culture, including the use of in-house surveys or surveys purchased from private companies. Some hospitals reported using adaptations of some of the short-listed surveys, for example the SAQ. No new tools were identified from consultation with hospitals, and there was a lack of consistency in the method used to assess safety culture.

Considerations for safety culture tool as part of AHSSQA Scheme

The authors identified 10 dimensions of safety culture that need to be assessed to gain a snapshot of an organisation's safety culture. These include:

- Leadership, particularly the support of safe practice
- Systems, procedures and processes exist that normalise or enshrine patient safety, or which are adhered to
- Resources for safety (such as staffing, equipment, training)
- The quality of interpersonal relationships (such as teamwork, collaboration within and across units)
- Communication, particularly about safety, including perceptions of being able to report and speak up
- A focus on learning from mistakes, responding and improving systems
- Individual staff characteristics and perceptions of their effect on work (such as job satisfaction, stress)
- General awareness of patient safety and/or it being a priority
- Other means of prioritising safety (such as through rewards and incentives)
- Actual safety issues witnessed/reported.

In addition to these 10 dimensions, the authors note the importance of covering issues of relevance to a contemporary health workforce that impact on safety culture, such as work-life balance.

The report outlined a number of essential characteristics that a safety culture-assessment tool would need if it were to be used during accreditation. These include:

- Providing adequate depth of information on the major dimensions of safety culture
- Being appropriate for gathering safety culture information in a reliable and valid way
- Being adaptable for multiple settings
- Not being too lengthy to facilitate a strong response rate
- Providing appropriate user guidance
- Allowing data to be collected and analysed across health service organisations as part of accreditation.

The review made recommendations for two possible approaches that could be developed for large-scale implementation of assessment of safety culture in health service organisations:

- Mixed-method assessment package combining a quantitative measure of safety culture with a qualitative component, such as a focus group to provide greater detail on key areas of the survey findings
- Prescriptive assessment plan to provide a framework for collection, analysis and reporting of data on safety culture.

Conclusion

The safety culture of an organisation is an important component of supporting safety and quality improvements, and therefore is an important facet of implementing the NSQHS Standards. While the response rate from hospitals as part of this review was not high (26%), it does indicate that safety culture assessments are already taking place in some hospitals.

The report that follows this preface concludes that no single tool is currently available that measures all major dimensions of safety and quality in health service organisations.

The report identifies a number of dimensions of safety culture that emerge across existing tools. These dimensions together with the strengths identified across existing tools could be used to build an assessment tool to test safety culture in health service organisations as part of assessment.

The Commission agrees with this conclusion, and notes the recommendations included in the report for development of an appropriate assessment package or plan.

Next steps

The Commission will consult with stakeholders, including states and territories, health service organisations and accrediting agencies, on an appropriate tool by which to assess the safety culture of health service organisations. Updates to the AHSSQA Scheme are planned to be put into practice for the commencement of accreditation by health service organisations to the NSQHS Standards (second edition) in January 2019.

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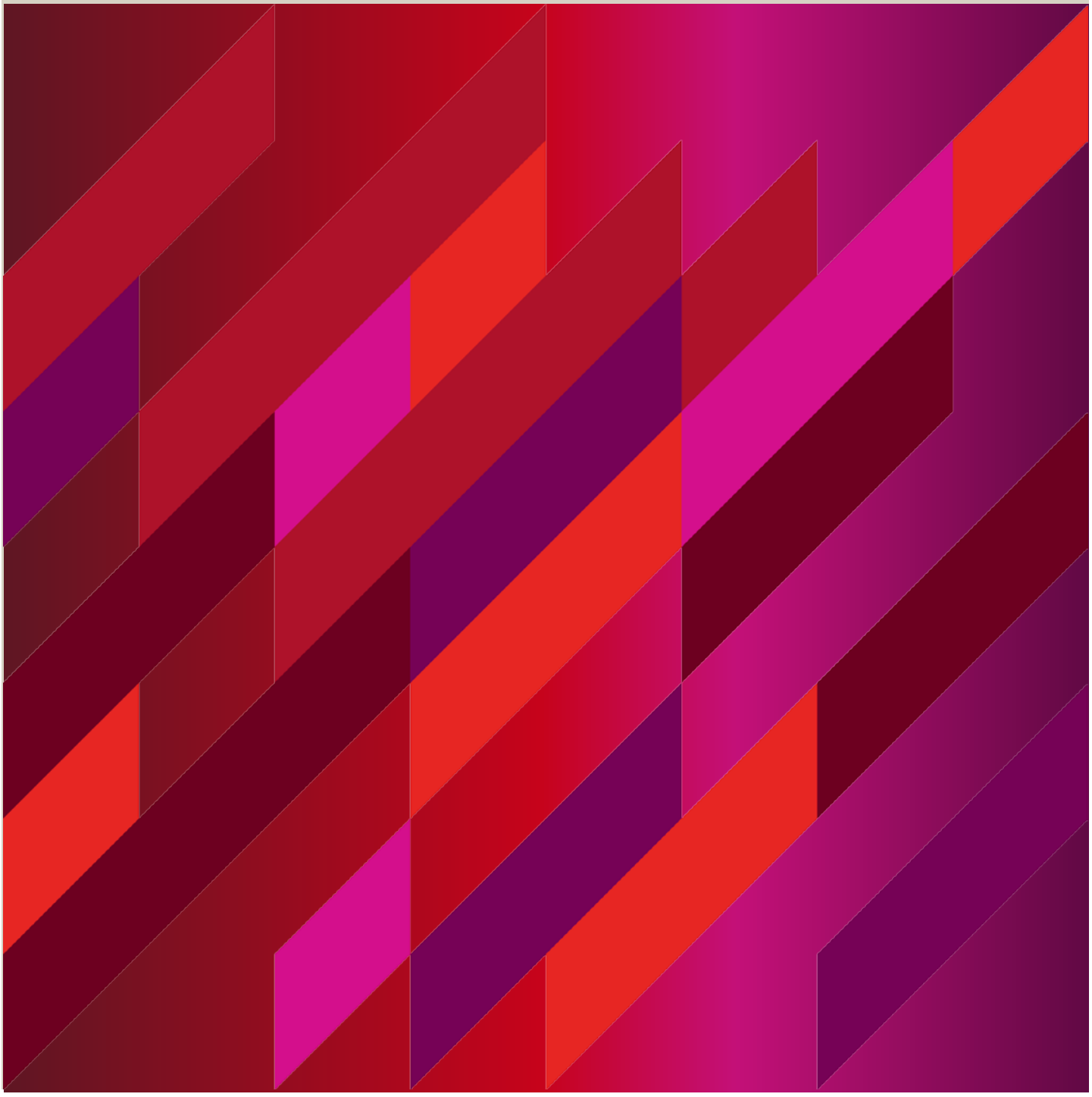
Safety Culture Assessment in Health Care: A review of the literature on safety culture assessment tools



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Safety Culture Assessment in Health Care: A review of the literature on safety culture assessment tools

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Summary

The concept of ‘safety culture’ has received attention over the past two decades in health care, as this aspect of organisational culture is thought to form a basis for the safe delivery of high quality health care. However, understanding and assessment of safety culture and its relationship to patient care has been obscured by the number of different tools used to measure it; in particular, the variation between these tools, which derive from differing conceptualisations of safety culture and their underlying constructs. The purpose of this review was twofold: first, to uncover the range of tools used to measure safety culture; and second, to determine their potential application as part of national accreditation assessment.

Through a review of the peer reviewed literature, grey literature, and contact with Australian hospitals, an initial number of 46 tools assessing safety culture were identified. These tools were assessed according to: the frequency of citation; validity; adaptability for multiple settings; the accessibility and cost; the underlying constructs measured; and whether training was required to administer the tool and analyse the results.

Nine tools considered the most suitable to evaluate safety culture within healthcare organisations, with potential for large-scale implementation, were shortlisted. Most were quantitative self-report survey measures: the Safety, Communication, Operational Reliability and Engagement survey (SCORE); the Safety Attitudes Questionnaire (SAQ); the Victorian Safety Climate Survey (VSCS); the Safety Climate Survey (SCSu); the Safety Climate Scale (SCSc); the Patient Safety Climate in Healthcare Organisations survey (PSCHO); the Modified Stanford Instrument (MSI); and the Hospital Survey on Patient Safety Culture survey (HSOPSC). One tool, the Manchester Patient Safety Framework (MaPSaF), used qualitative methods to capture participant viewpoints. These tools were compared for differences and similarities in the way they measured safety culture, alongside ease of use, extent of supporting literature and implementation guides, and psychometric properties.

Due to methodological limitations, no single tool captured the complexities of safety culture. Recommendations include considering the use of both quantitative and qualitative methods to evaluate safety culture as part of accrediting health service organisations to the NSQHS Standards.

1. Introduction

An organisation will have their values, beliefs, rules, norms and language assessed to determine if these factors impact on the delivery of high-quality patient care.

Over the past 30 years, a 'culture of safety' has been seen as integral to the assurance of ongoing safety in high-risk and high-reliability organisations—that is, systems operating in hazardous conditions that have fewer than their fair share of adverse events (1)—such as in aviation and nuclear power (2). While many definitions of safety culture have been published, one of the most commonly used is: 'The product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization's health and safety management' (3). Organisations with a positive culture of safety have communications among co-workers that are founded on trust, a shared valuing of the importance of safety, and confidence in the effectiveness of organisational prevention initiatives (3). Safety culture feeds into the broad umbrella of workplace culture, supporting an organisation's core values and mission. Even so, there is no guarantee that evaluations of workplace culture will include adequate assessment of safety culture.

More recently, safety culture has been embraced in health care (4). Research into the relationship between safety culture and health care safety improvement and outcomes has proliferated (2). Yet, unlike research on safety culture in other industries, the study of safety culture in health care has been challenged by difficulties in definition and measurement (2, 5). Moreover, the perception of safety culture is highly dependent on the context in which it is assessed (5). Because of this, safety culture is reputed to have '...the definitional precision of a cloud' (6).

To overcome difficulties of definition and measurement, some researchers consider it more feasible to evaluate the *safety climate* of an organisation (7, 8). Closely related to safety culture, safety climate has been defined as '... measures of perceptions and attitudes among personnel working in an organization about practices, policies, procedures, and routines indicative of the underlying safety culture' (9). Climate, as a temporal state measure of culture, has been described as a 'snapshot' through which to view safety culture (8). However, the increasing interest in the study of safety climate and/or safety culture, as well as the fact that some researchers distinguish between them, while others do not, has led to the two terms often being used interchangeably in the research literature. Accordingly, in this review, we will use the term 'safety culture' to cover both culture and climate.

There is little conceptual research literature to underpin what dimensions make up safety culture. Different measurement tools focus on different aspects, such as leadership and management, reporting or staff wellbeing (10). In their systematic review of 12 studies of safety climate

measurement in health care, Flin, Burns, Mearns, Yule and Robertson (10) identified 10 common themes that were prioritised or included across the range of measurement tools. These were:

1. Management/supervisors
2. Safety systems
3. Risk perception
4. Job demands
5. Reporting/speaking up
6. Safety attitudes/behaviours
7. Communication/feedback
8. Teamwork
9. Personal resources (such as stress)
10. Organisational factors.

Another conceptualisation of safety culture, from Australian Commission on Safety and Quality in Health Care (the Commission), outlined dimensions of a positive safety culture within a healthcare organisation (11) (see Box 1).

Box 1 What does a positive safety culture look like?

Organisations with positive safety cultures have:

- Strong leadership to drive safety culture
- Strong management commitment with safety culture a key organisational priority
- Staff who are always aware that things can go wrong
- Acknowledgement at all levels that mistakes occur
- Non-blame, non-punitive response to error
- Ability to recognise, respond, give feedback and learn from adverse events.

The range of tools developed to measure safety culture have proven useful for researching safety culture within and between healthcare organisations (12). This measurement is frequently conducted at a single time point (13), to measure safety culture, or to verify the tool itself by demonstrating its effectiveness (14, 15). A small number of studies have evaluated changes to safety culture within healthcare organisations over time, as the organisations implement and respond to improvement (16). However, broader issues remain. The appropriateness of these tools for assessing and comparing healthcare organisations at a national level is unknown. Moreover, the link between a strong patient safety culture and high-quality patient care is unclear and the evidence that a positive patient safety culture leads to improved patient safety is by no means conclusive (17-19). Thus, the purpose of this review is to identify current tools for assessing safety

culture, and their applicability to healthcare organisation accreditation. Given conflicting understanding of safety culture, and a lack of explicit theoretical guidance in the development of some of the existing measurement tools, this review also explores the most common dimensions of safety culture measured safety culture tools.

Research questions

Overarching question:

Is there a tool that could be used to evaluate the safety culture of an organisation during the process of assessing hospitals to the NSQHS Standards (second edition)?

Sub questions:

What tools are available to evaluate safety culture in health service organisations?
For each tool:

- How is the tool utilised to evaluate the safety culture of health service organisations
- What are the tool's strengths and weaknesses
- What are the criteria for using the tool
- What are the practical implications of using the tool during the accreditation process?

2. Method

This review was conducted by scoping the peer reviewed literature (20) and grey literature to identify tools used for assessing safety culture in healthcare organisations. Additionally, contact was made with a sample of Australian hospitals to determine how healthcare organisations are currently assessing their own safety culture. The review also sought to evaluate the quality of the tools, and their feasibility for use, as part of an accreditation assessment.

2.1 Tool identification

Tools assessing safety culture and/or safety climate were sought from across a range of healthcare settings. Tools assessing 'quality culture' were also considered because the terms 'safety' and 'quality' may often be used together or interchangeably in health care.

2.2 Search strategy

1. *Peer reviewed literature search:*

To be included in this peer reviewed literature search, studies were required to have:

1. Reported on empirical research, OR reviewed studies using tools to assess the safety (or quality) culture or climate of a healthcare organisation
2. Published between 2007-2017
3. Published in English.

All non-English studies were excluded, as well as conference abstracts, and papers with no abstract. Terms, titles and abstracts were searched as keywords in all databases. Snowballing was also used to identify studies from reference lists of included studies, and from Google Scholar.

Four databases were searched for studies addressing tools that assessed safety culture. PubMed, CINAHL, Scopus, and Web of Science entries from 2007 to 2017, using the search string: ('acute care' OR 'hospital') AND ('quality culture' OR 'safety culture' OR 'culture of safety' OR 'safety climate' OR 'safety attitude') AND ('survey' OR 'questionnaire' OR 'tool' OR 'instrument' OR measur* OR assess* OR checklist OR 'check list' OR observ*) AND ('patient safety' OR 'public safety' OR 'workplace safety').

2. *Grey literature search:*

Grey literature available through the internet and health organisation websites was searched for additional references to tools. Documents included government reports, and health organisation reports.

3. *Search of tools used in Australian hospitals:*

To further enhance the search strategy, and ensure no important tools were missed, Quality and Safety or Clinical Governance teams of hospitals in Australia were contacted directly by the study team. Information on whether, and if so, how, hospitals were currently assessing safety culture, or had done so in the past, was requested. Thirty public hospitals classified as 'major hospital with emergency department', from the 'My Hospitals' website (21), in addition to a random selection of 5 large (beds > 200) private hospitals were contacted via email and phone, requesting information about their assessment of safety culture. The privacy and confidentiality of specific hospitals and key informants was assured when sending out the enquiries.

4. *Assessment of tools*

A shortlist of tools that were potentially suitable for use during the process of assessing health service organisations against the NSQHS Standards was formed. In assessing these tools, factors such as their ease of use (including time to complete), support for their utilisation, how widely they had been used, and whether they have enabled or been used to assess interventions to improve safety and quality. Given the variation in the definitions of safety culture as well as between tools in the types of questions and purported constructs or composites measured, effort was also made to identify similarities and differences in the aspects of safety culture the tools focused on in individual items, as well as in subscales. This process was independently completed by all reviewers, then verified by two reviewers (LE and KC).

Where appropriate, the psychometric properties of tools were also considered (Box 2).

Box 2 Assessing psychometric properties of scale: key terms

Scale/Subscale

A questionnaire tool is a scale, composed of a number of questions/items that provide a score, for example, of safety culture (22). It is common for a scale to be broken into discrete subscales, similar items that measure a specific dimension of safety culture (e.g., perceptions of management as prioritising safety).

Psychometric properties

Psychometrics is the construction and validation of scales and subscales, and assessment of whether these are reliable and valid forms of measurement. Excellent psychometric properties indicate that a questionnaire is well evaluated and is reliable and valid (23).

Reliability

Reliability is achieved when a scale or a subscale consistently measures the same construct; for example, the items of one subscale are all answered in a similar way by respondents, or they answer the questions in a consistent way over time. It is usually measured with computable statistics based on correlations such as Cronbach's Alpha (with a range of 0-1 and acceptability level of 0.7 or higher (24)).

Validity

Validity refers to the extent a scale or subscale is accurate, and measures the construct it aims to measure. Factor analysis is commonly used to investigate construct validity, by examining the underlying structure of a scale and testing whether there are distinct factors or themes being measured.

Construct

Psychometric properties relate to questionnaire tools that attempt to measure something that is not directly observable, such as an individual's behaviour, beliefs, knowledge, attitudes or attributes (23) typically through self-report. Such an unobservable quality, a "postulated attribute of a person", is referred to as a "construct" (25). As such, staff's perception of safety culture, or even a dimension of safety culture, could be considered a construct.

3. Results

3.1 Results of literature search

The results of the literature search are presented in the following order: an overview of the results; a summary of the methods used; and summaries of safety culture tools presented by research group. The findings from direct contact with a small sample of Australian hospitals are then given.

3.1.1 Overview

The search of tools to assess the safety culture in the peer-reviewed literature retrieved 2,730 papers. All results were combined and duplicates were removed. Studies identified from the reference lists of those papers were also reviewed, giving a total of 1,158 papers (Figure 1).

Initial title and abstract review led to the extraction of 46 named tools, which were then evaluated through full-text review. This stage of the review highlighted that many tools were not distinct tools, but were: duplicates of other already published tools, with name-variations or inaccurate citation; adaptations or amalgamations of those published tools for specific study purposes; or assessments of other aspects of hospital culture, such as high value care culture. These tools were excluded. A small number of tools (n=4) were specifically developed for assessing residential aged care (for example, the Survey on Resident Safety in Nursing Homes SRS-NH) (9) and primary care practices (such as the PC SafeQuest) (26). These were excluded because of their inability to be adapted to acute care organisations. There were also several study-specific tools that had not had findings replicated (demonstrated by low citations in PubMed or Google Scholar), were rarely implemented, or had not been validated. Accordingly, there was little evidence to support their ability to rigorously assess safety culture. These tools were deemed unsuitable to inform a national accreditation assessment, and are not considered in this review.

Tools that had been recently developed by well-established research groups (such as Sexton and colleagues' development of the SCORE, see below) were included if they were reported to improve the psychometric properties of older tools. While some of these newer tools lacked citations, they showed promise for advancing the assessment of safety culture, and had potential to contribute to assessment on a large scale.

No additional tools were identified during the search of the grey literature. In total, nine tools were identified to have the potential to rigorously assess safety culture in healthcare settings. The similarities and differences between the tools are reported and rated in Table 1. Of note is that the 10 dimensions of safety culture identified through the item- and subscale-level review of the tools (Table 1) bear considerable similarity to the 10 themes identified by Flin et al (10) in their review of safety climate measurement in health care.

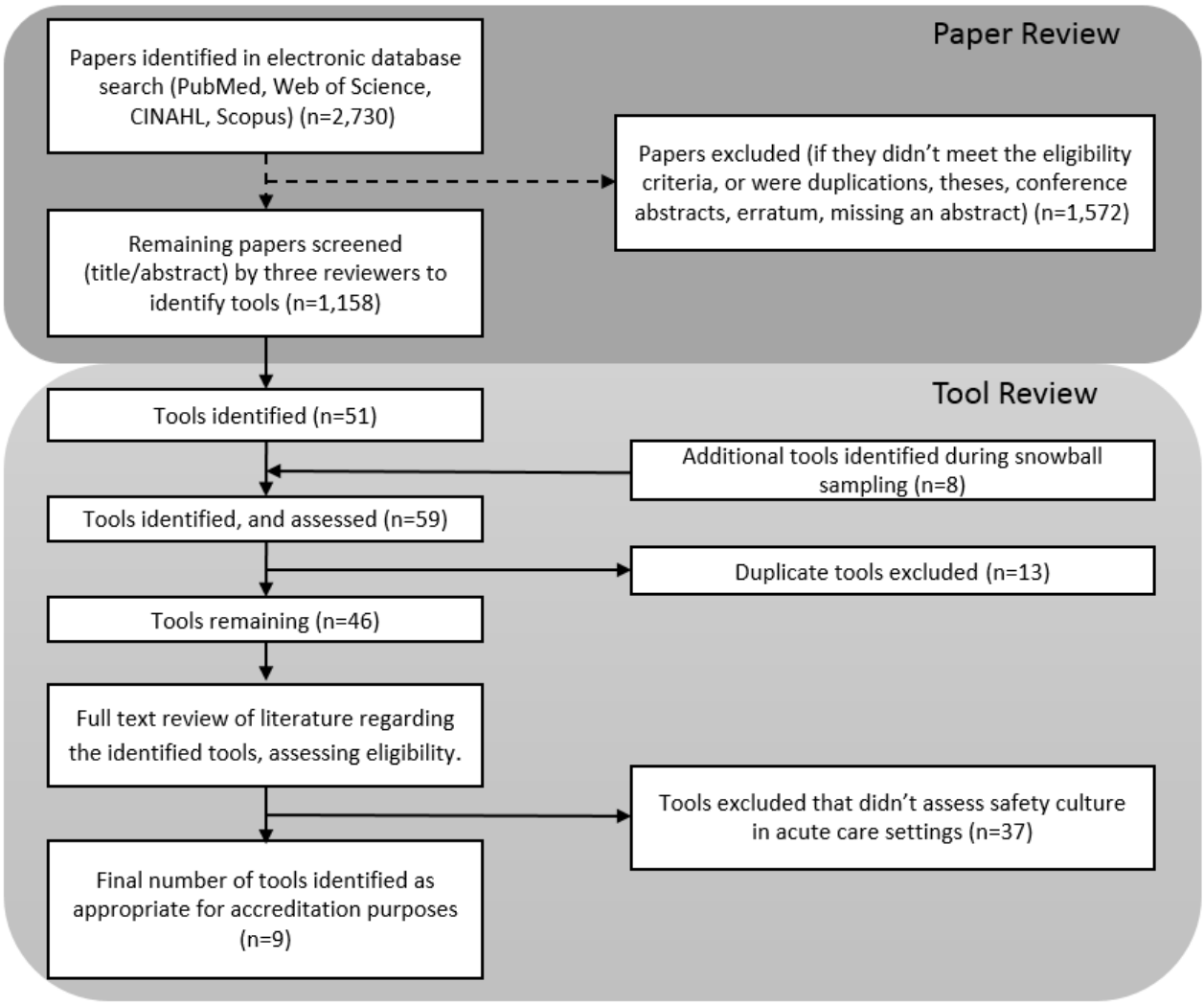

Figure 1: Flow chart of the review of literature to identify tools for accreditation

3.1.2 Summary of methods utilised to assess safety culture

Quantitative methods, specifically paper or web-based surveys, were most commonly used to assess safety culture. The eight survey tools discussed in this review used Likert scales to rate participant perceptions of safety culture. With the addition of demographic questions, the time needed to complete the surveys ranged from five minutes for the Safety Climate Scale (10 items) to over 20 minutes for the longer tools, such as the PSCHO (38 items). These are estimations, as many of the tool developers do not report the time required (refer to Table 1 for details).

Only one tool, the Manchester Patient Safety Framework, collected qualitative data. This tool gathers participants' opinions on safety culture using workshops, facilitated by staff members familiar with safety culture. The workshops generate data by promoting staff reflection and discussion on issues safety culture that affect their workplace.

Table 1: Summary of tools assessing safety culture in health care

	Authors	Sexton et al					AHRQ	Stanford group		Manchester University group
	Tool name (year developed)	**SAQ (2004)**	**SCSu (2005)**	**SCSc (2003)**	**Vic SCS (2011)**	**SCORE (2014)**	**HOPSC (2004)**	**MSI (2006)**	**PSCHO (2007)**	**MaPSaF (2006)**
SETTING	Acute care	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Home care organisations					✓				
	Primary care									✓
	Critical care units									
	Inpatient settings	✓								
	Operating rooms	✓								
	Ambulatory clinics	✓								
	Long-term care							✓		
	Community clinic					✓		✓		
	Prehospital care							✓		
	Community pharmacy			✓		✓	✓			
	Behavioural/mental health clinic					✓				✓
	Ambulance									✓
PROPERTIES	Validated	✓	✓	NR	NR	✓	✓	✓	✓	NR
	User guide/Quality improvement programs provided with tool		✓		✓		✓			✓
	Time to complete (minutes)	10-15 (Short)	NR	NR	NR	NR	10-15	NR	Full - NR Short =10	> 120
	Number of items (version)	36 (Short) 60 (full)	21	13	42 (short) 74 (full)	48	42	32	15 (short) 38 (full)	10
	Acceptable Reliability	✓	✓	✓	NR	✓	✓	✓	✓	✓
	STAR RATING									
DIMENSIONS OF SAFETY CULTURE	1. Leadership, particularly their support of safe practice	**	*	*	**	**	***	***	***	
	2. Systems, procedures and processes exist that normalise/enshrine patient safety, and/or are adhered to	*	*	*			*	*	**	***
	3. Resources for safety (e.g., staffing, equipment, training)	**			**		**		**	**
	4. The quality of interpersonal relationships (e.g., teamwork, collaboration within and across units)	**			**	**	***		*	**
	5. Communication, particularly about safety, including perceptions of being able to report and speak up	*	*	*	*	*	***	***	***	***
	6. A focus on learning from mistakes, responding and improving systems	*	*	*	*	**	**	***	***	**
	7. Individual staff characteristics and perceptions of their effect on work (e.g., job satisfaction, stress)	**			**	***				
	8. General awareness of patient safety and/or it being priority	**	*	*	**	**	***		**	**
	9. Other means of prioritising safety (e.g., through rewards and incentives)								**	
	10. Actual safety issues witnessed/reported						***		**	

Legend

* Items related to this dimension but no subscale specifically measuring it

** A whole composite or subscale measuring this dimension

*** Multiple subscales or composites measuring this dimension

NR Not reported

3.1.3 Tools developed by Sexton et al (University of Texas/Duke University Health System)

Safety Attitudes Questionnaire (SAQ)

The Safety Attitudes Questionnaire (SAQ) was developed by Sexton and colleagues more than two decades ago at the University of Texas, United States (US). The questionnaire comprises six factors: *Teamwork Climate; Safety Climate; Job Satisfaction; Perceptions of Management; Working Conditions; and Stress Recognition.* The SAQ has been adapted for use in several different settings, including intensive care units, operating theatres, general inpatient settings, and ambulatory clinics. The full version of the questionnaire includes 60 items, of which 30 items are standard and identical across all settings. Each of the items is answered using a five-point Likert scale, from 'Disagree Strongly' to 'Agree Strongly'. The generic SAQ Short-form version (Appendix 1), recommended for hospital-wide administration, includes the 30 standard items from the full SAQ, plus an additional six items, providing a total of 36 items (and an additional three demographic items). Like the full form, the SAQ Short Form is also answered using a five-point Likert scale.

The SAQ is one of the most widely used and rigorously evaluated tools for measuring safety culture in health care. The short-form is free to access, quick to complete (10 to 15 minutes), and is available in many languages (including Norwegian, Turkish, Dutch, Chinese, Swedish, German, Portuguese and Arabic). It can be used to compare the attitudes of different types of staff, and can be used to monitor changes over time with repeated implementation. In addition, it is considered the only tool providing evidence of direct association with patient outcomes. It is available from: https://med.uth.edu/chqs/surveys/safety-attitudes-and-safety-climate-questionnaire/

Sexton et al (2006) reported acceptable psychometric properties for the 30 standard SAQ items. However, more recently, concerns have been raised over the construct validity of the SAQ *Stress Recognition* subscale. Following a reanalysis of previously published studies (27, 28), Taylor and Pandian (2013) in their examination of the correlation matrices and confirmatory factor analysis results showed that the *Stress Recognition* subscale does not fit into the overall safety climate construct the SAQ intended to reflect (29). As a result, Taylor and Pandian (2013) concluded that the *Stress Recognition* subscale is a separate construct not reflective of safety climate and therefore, not sensitive to interventions designed to improve it (29). Others have similarly highlighted that the *Stress Recognition* items 'do not contribute positively towards the construct of safety climate as intended and should be excluded from the SAQ' (27). More studies are needed to assess the separation of this domain from the rest of the tool (30).

The SAQ has been used as the basis for a number of other tools that measure safety culture (Figure 2).

Figure 2: **Relationship between tools developed by Sexton et al**

Safety Climate Survey (SCSu)

The Safety Climate Survey (SCSu) (31) is a 21-item survey developed by Sexton and colleagues to measure the attitudes and perceptions of frontline clinical staff regarding safety structures and processes (Appendix 2). Items were based on the SAQ (Figure 2). The survey was previously freely available online, but this is no longer the case. The survey has satisfactory reliability (internal consistency = 0.86; test retest reliability = 0.92), good response rates (74%), and can be used to monitor change over time (31). A weakness of the tool is that it does not provide separate subscale scores and does not include items assessing some of the core dimensions that appear to underpin safety climate (such as teamwork). The SCSu can be found at:
http://www.ihi.org/resources/Pages/Changes/DevelopaCultureofSafety.aspx

Safety Climate Scale (SCSc)

Pronovost et al (2003) (32) was the first peer reviewed article to disclose the Safety Climate Scale (SCSc), a 10-item scale derived from the SAQ (Appendix 3). Nine of the items of the SCSc overlap with the SCSu. The scale is very short, with similar reliability to the SCSu and has good response rates. However, this tool has not been used as widely as either the SAQ or the SCSu. There is limited evidence on how responsive this survey is to change. Additionally, it does not provide subscale scores, and does not include as many core dimensions of safety climate as some other tools.

Victorian Safety Climate Scale (Vic SCS)

A more recent adaptation of the SAQ, the [Victorian] Safety Climate Survey (Vic SCS), has been developed by the Victorian Managed Insurance Authority (VMIA) and the Victorian Quality Council (VQC) to examine patient safety climate in hospitals (33) (Appendix 4). The survey items were adapted from the full SAQ and comprise six of the original SAQ factors: *Teamwork Climate; Safety Climate; Job Satisfaction; Perceptions of Management; Working Conditions; and Stress Recognition*. Item content from the SAQ was kept consistent, but terms for specific work settings (for example, ICU) were replaced with the generic term 'work area', so that the tool was widely applicable across Australian health services. Adjustments to layout, terms and phrases were also made so that they were more relevant and applicable to the Australian audience. The survey has a full version with 74 items and a short version with 42 items, with both versions being freely available. Each of the items are rated on a five-point Likert scale ('Strongly Disagree' to 'Strongly Agree'). All hospital staff can complete the survey (from doctors, nurses and allied health, to cleaning and security staff). To date, a few Australian health services have used the survey, though no information on reliability and validity is publicly available. Further, no psychometric testing results have been reported. The tool is available from: https://www.vmia.vic.gov.au/risk/risk-tools/patient-safety-climate

SCORE survey

More recently, in 2014, Sexton and colleagues updated the SAQ to reflect contemporary healthcare safety needs (34). The SCORE (Safety, Communication, Operational Reliability and Engagement) survey (Appendix 5) retains the SAQ domains of *Teamwork Climate and Safety Climate*, but includes four new domains including *Work-Life Balance, Burnout, Learning Environment* (new domain for 2016) *and Local Leadership* (new domain for 2016). Items from the original SAQ *Teamwork Climate* and *Safety Climate* scales have been revised and updated for this survey. The *Stress Recognition* subscale has been replaced by items relating to *Work-Life Balance* and *Burnout*, based on their significant associations with patient outcomes (e.g., absenteeism, poor staff retention, poor performance) (34).

The SCORE survey consists of 48 items, most of which use a five-point Likert scale ('Disagree Strongly' to 'Agree Strongly'). From the research that has been undertaken on SCORE so far, the survey appears to have good reliability (internal consistency estimates = 0.82-0.92) and validity (Sexton et al, 2007). Further, the authors report that, as the SCORE has evolved, 'Safety Climate, Teamwork Climate, and Burnout have emerged as primary factors in overall safety culture' (Duke University Healthcare System. 2016). More recently, in 2014, Sexton and colleagues updated the SAQ to reflect contemporary healthcare safety needs (34). Given the relatively recent addition of *Learning Environment* and *Local Leadership* to safety culture assessment, comparisons of their predictive validity for clinical and operational outcomes, relative to *Teamwork*, *Safety* and *Burnout*

Climate, are ongoing areas of research (34). The tool is available for purchase from: https://www.safeandreliablecare.com/surveys/

3.1.4 Tools developed by the Agency for Healthcare Research Quality (AHRQ)

The Hospital Survey on Patient Safety Culture (HSOPSC)

The Hospital Survey on Patient Safety Culture (HSOPSC) is another widely-utilised survey, which was originally developed by the Agency for Healthcare Research and Quality (AHRQ), within the United States Department of Health & Human Services in 2004 (Appendix 6). The survey is designed to measure staff opinions about patient safety issues, medical errors, and event reporting. The original survey was developed for use in hospitals, but has been adapted, with a range of versions now available measuring patient safety culture in community pharmacy, ambulatory surgery, nursing homes, and outpatient medical offices, including primary care (35). The HSOPSC has also been translated into a range of languages, including Farsi, Arabic, French, Dutch, and Spanish.

The surveys are free-to-access; however, for organisations outside the US permission must first be sought from Westat (SafetyCultureSurveys@westat.com). The HSOPSC can be completed by all hospital staff who have sufficient knowledge about the hospital. Even so, the survey is better suited to those who have direct contact with patients and/or whose work directly affects patient care. The hospital version of the questionnaire is made up of 42 items measuring 12 “composites”, which are treated like subscales, in that discrete overall scores are calculated for each of them. These 12 composites provide insight into how the developers of the HSOPSC understand the dimensions of safety culture:

1. Management support for patient safety
2. Teamwork within units
3. Teamwork across units
4. Communication openness
5. Frequency of events reported
6. Feedback and communication about errors
7. Organisational learning - continuous improvement
8. Nonpunitive response to errors
9. Handoffs and transitions
10. Staffing
11. Supervisor/manager expectations and actions promoting patient safety
12. Overall perceptions of patient safety.

Additionally, there are two outcome questions, in which participants provide a grade for their overall patient safety and the number of the events they have reported in the last twelve months.

The AHRQ runs a database that allows for the comparisons of HSOPSC results between US hospitals, with the intention to support patient safety culture improvement. The database also allows for examination of trends, with the most recent report (36) suggesting small improvements in patient safety culture over time. Further to this, the AHRQ publishes an Action Planning Tool, intended to be implemented after the HSOPSC and provide guidance on setting goals and implementing actions to improve patient safety culture. The HSOPSC has been used in the diagnostic and evaluation of quality improvement initiatives (37, 38).

The HSOPSC takes approximately 10-15 minutes for a participant to complete. However, it is less straightforward than some of the other standardised surveys identified, because the available responses vary for different questions. For example, some have the typical Likert scale ('strongly agree' to 'strongly disagree'), while other questions use more general rating scales (for example, patient safety grade from 'excellent' to 'failing'). This could make the survey more confusing and time consuming to complete, and may interrupt the flow of response (22).

Reports on the psychometric properties of the HSOPSC have been somewhat mixed. Multi-level analysis found that the constructs are psychometrically sound at the individual, unit, and hospital levels of analysis (39). However, other analyses using factor analysis have found only partial confirmation of the validity of the subscales, with only eight of the 12 composites closely reproduced; furthermore, the reliability of these composites reached acceptable level for only half them, and these estimates of reliability varied by staff, with lower reliability among responses from physicians than nurses (40). This suggests that the items within some of the composites of the HSOPSC, which would be expected to be related to one another, are not answered in a consistent way, particularly among doctors. In terms of the criterion validity, the extent to which its scores of safety culture are related to outcomes, such as indications of actual patient safety, further investigation is required (18). Safety culture, as measured by the HSOPSC was shown to have no relationship to a specific patient safety outcome (that is, catheter acquired infection) (37). The HOSPSC is available from: https://www.ahrq.gov/professionals/quality-patient-safety/patientsafetyculture/hospital/index.html

3.1.5 Tools developed by the Stanford group and Singer et al

The Stanford group of tools comprise: the Stanford Patient Safety Centre of Inquiry Culture Survey (PSCI) (41); the Modified Stanford Instrument Patient Safety Culture in Healthcare Organisations Survey (MSI) (5, 42); the Patient Safety Climate in Healthcare Organisations (PSCHO) (35); and the Short-form PSCHO (15) (Figure 3).

Figure 3: Relationship between tools developed by the Stanford group

The Stanford and PSCHO tools were developed from a common conceptual framework of safety culture (15, 43) which features domains of safety culture at organisation, unit and interpersonal levels.

Stanford PSCI Culture survey and Modified Stanford Instrument (MSI-06)

The original Stanford tool assessed 30 items, across 5 factors of:

1. Organisation
2. Department
3. Production
4. Reporting/seeking help
5. Shame/self-awareness.

Responses are rated using three types of scale: a 5-point Likert scale, a 'yes'/'no'/'uncertain' scale, and a 5-point frequency scale. As a scale-based survey, the survey could be administered by internal or external assessors. Although there were 30 items to complete, the survey did not provide comprehensive coverage of issues underpinning safety culture. This lead to the development of the Modified Stanford Instrument (MSI-06**)** (5, 42) to address the issues of comprehensiveness (Appendix 6).

The MSI-06 rates 32 items across 5 dimensions of:

1. Organisation leadership for safety
2. Unit leadership for safety
3. Perceived state of safety
4. Shame and repercussions of reporting
5. Safety learning behaviours.

The strengths of the modified Stanford tool are that it can be used to assess a broad range of healthcare organisation staff; including direct care providers (nurses, medical officers, allied health practitioners and technicians) clinical educators and managers, and support service staff and managers such as unit clerks, housekeeping staff, and health records technicians. The MSI-06 builds on the strengths of previously validated tools - the Stanford PSCI (44) and AHRQ HSPOS

(35) - and was developed for use in range of healthcare settings, including acute and long term-care, and community settings. Even so, Ginsberg et al advised that this modified tool needed considerable refinement, due to inadequate psychometric properties.

Patient Safety Climate in Healthcare Organisations (PSCHO)

The PSCHO (43) was adapted from the Stanford Patient Safety Instrument (41). It contains 38 items evaluating the interrelated topics of *organisational; work unit; and interpersonal factors* (Figure 4). Using a two-page form, items are rated on a 5-point Likert scale (see Appendix 7). There are few reports of how long the survey takes to complete, but based on the number of items, 20 to 30 minutes is estimated. The PSCHO was the first tool to measure components of *safety climate* (as opposed to safety culture) and drew on lessons learned from measuring safety climate in industries outside of health care (45). The survey gathers opinion from clinical and management staff, and can be used across a range of hospitals. The tool has undergone extensive psychometric testing, and has been used to compare different types of hospitals and hospital units. In Australia, the PSCHO has been used to evaluate attitudes to falls prevention (46). The original form has been modified for length (47, 48) and adapted for several languages and acute care contexts (49).

Few studies have addressed the ongoing impact of safety culture assessment. The PSCHO was used in one Canadian longitudinal study to measure safety culture at two points in time in a single regional hospital (50). Initial testing with PSCHO revealed poor safety culture within the hospital, and so initiatives were put in place by the hospital board to improve the problem areas. After two years, the safety culture was re-assessed using the PSCHO. Disappointingly, only minor improvements were found. The researchers considered that these poor results were a reflection broader workplace upheaval (including staff reorganisation) that took place during the two-year period. As the PSCHO lacks a qualitative component, the researchers were unable to confirm their view.

Short-form PSCHO

More recently, Benzer, Meterko and Singer (2017) developed and validated a Short-form PSCHO (15) to resolve the problem of time and effort required to complete the full-form version. Containing 15 items (plus two optional items), the short form survey is based on the same conceptual model as the PSCHO and Stanford tools (Fig 1), evaluating *organisation, work unit, and interpersonal* factors. The short-form PSCHO was developed to take 10 minutes to complete. As a new version, it is as yet unknown if the short form can more efficiently deliver the same benefits of the full-form PSCHO.

3.1.6 Tools developed by the Manchester University group

Manchester Patient Safety Framework (MaPSaF)

The Manchester Patient Safety Framework (MaPSaF) (51, 52) evaluates staff perceptions of safety culture within healthcare organisations through a process of facilitated reflection and discussion (Appendix 8). The framework has 4 versions, covering acute and primary care, ambulance and mental health organisations. In a workshop environment, staff rate their team and their organisation on 10 aspects of patient safety culture:

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

These aspects are rated on a 5-level matrix, based on Westrum's (1992) stage model of organisational culture maturity (53). The ratings are: A=pathological; B=reactive; C=bureaucratic; D=proactive; and E=generative. The workshops are conducted for 10 -12 people, and take around two hours to conduct.

According to the Manchester group, the frameworks can be used to assess progress in development of a safety culture and organisational maturity, by:

- Facilitating reflection on patient safety culture
- Stimulating discussion about the strengths and weaknesses of the patient safety culture
- Revealing any differences in perception between staff groups
- Helping understand how a more mature safety culture might look
- Helping evaluate any specific intervention needed to change the patient safety culture.

A guide is available to select and train facilitators of the workshops. Facilitators should understand risk management processes within the organisation, and as such, internal assessors are recommended. The assessment requires time that would make it impractical for use during an accreditation assessment. However, results of the assessment previously undertaken may

comprehensively portray the safety culture of the organisation at that point in time, and reveal issues to be addressed during the next accreditation cycle. The Manchester University frameworks are available from: http://www.nrls.npsa.nhs.uk/resources/?entryid45=59796

3.2 Results from consultation with Australian hospitals

Of the thirty-five hospitals contacted, 9 responses were received (26%). Results yielded several methods through which safety culture was assessed (Table 2). These methods lacked standardisation or consistency between organisations, and no new systematic or psychometrically valid tools were identified through this search strategy.

Assessment of patient safety culture sometimes involved the use of in-house surveys or those purchased from private companies, however, enquiries with these companies suggested these private surveys were often adaptations of those already identified above (such as the SAQ). Some hospitals also used multiple methods of data collection to assess their safety culture. A number of organisations used the SAQ to assess safety culture (n=3), although this was sometimes adapted (for example, reducing the number of questions). State-wide surveys of workplace culture were also reportedly used within hospital as part of assessing their own safety culture.

Table 2: Safety culture assessment in nine Australian hospitals

Means of Assessment	Details	Strengths	Limitations	Number of hospitals[1]
People Matter Survey	A state-wide survey of employees working in the public sector, asking about their experiences with their own work and working with their team, managers and the organisation.	Widely used, with data publicly available for the health workforce and by district (e.g., local health district).	Not specific to healthcare delivery, nor to safety culture.	1
YourSay Workplace Culture Survey	A New South Wales Health survey of workplace culture, which includes some questions on patient safety and service quality.	Widely used, with data publicly available for the health workforce and by district (e.g., local health district).	Not specific to safety culture. Psychometric properties unreported, making it unclear how reliable or valid.	1
In-house surveys	Adaptations of existing surveys, sometimes reduced substantially for length, as well as completely idiosyncratic surveys and assessments (e.g., testing knowledge of safety and safety culture).	Developed to be most suitable to local context. Many in-house surveys based on the well-established SAQ.	Often lacking standardisation (i.e., adaptation), limiting possibility of comparison across services	4
Private Survey	A number of private companies (Pascal Metrics, Press-Ganey) provide surveys purporting to assess patient safety culture.[2]	Unable to fully assess, but included full support with data capture and analysis.	Anticipated substantial cost	3
Multiple methods	This might include more general surveys of workplace culture, in-house tools, clinical engagement, patient satisfaction, patient safety reporting and feedback systems.	Allows for triangulation of multiple sources of data.	Requires collecting large amounts of data. Potential difficulties in computing an overall picture of safety culture. Difficulty in comparing organisations with different methods and unstandardised tools for collecting data.	5

[1] Categories are not mutually exclusive.
[2] Full access to these surveys was not achievable.

4. Discussion

Methodological strengths and weaknesses of survey tools used to assess safety culture in health care are well documented (2, 54, 55). Most of the survey tools identified in this review are well-validated self-report measures, using simple Likert scales. This is a practical, time-efficient and effective way to gather large amounts of data across one or more participant groups, in a reliable and reproducible manner. Most of the surveys could be completed within 15 minutes. Likert scale data collection also allows rapid analysis and reporting. All the survey tools were relatively easy to administer, and could be used by internal or external assessors to collect, analyse and report data on patient safety culture.

At the same time, the tools reviewed here were not suitable for assessing all aspects of safety culture in a reliable and valid way. Despite numerous similarities of questions used in surveys of safety culture, there were also differences in the degree to which tools focused on aspects of safety culture. The 10 dimensions of safety culture that were identified here through the item- and subscale-level review of the tools (Table 1), appear to be fairly robust, bearing considerable similarity to the 10 themes identified by Flin et al (10) in their review of safety climate measurement in health care.

From the review of the tools in the present report, it was apparent that no one means of assessment covered every dimension of safety culture, and not to the point where a reliable estimate of each dimension could be derived. Achieving this would require having an entire subscale specifically focused on that particular dimension. The most notable example of this difference in focus on dimensions of safety culture was in those tools that prioritised individual staff characteristics (such as stress and burnout); i.e., those developed by Sexton et al. With the accumulated evidence for the impact of staff characteristics (including burnout and engagement) on safety outcomes (56), excluding these dimensions from assessments of safety culture is no longer desirable. Thus, our review suggests that no single tool, as currently formulated, adequately assesses all important dimensions of safety culture.

Furthermore, survey tools have well known limitations. Response rates to safety culture surveys vary considerably, with one review identifying a range between 23% and 100% (57). While health professionals are supportive of participation in safety culture assessment (58), the longer the survey, the less likely the survey is to be completed (15). Moreover, surveys relying on self-reported data are '... unlikely to elicit deeper aspects of the organisation's culture, such as the core assumptions or primary beliefs and values held by staff' (54). While this method is able to describe or summarise attitudes, it does not offer sufficient explanation to give deeper interpretation of patterns or correlations within the data (54). Additionally, there are known to be issues of bias with

self-reported data such as surveys (59), particularly as it can be desirable, or staff may even feel pressured, to report a positive safety culture, especially in the context of accreditation.

This review and critical assessment of tools used to measure safety culture in health care, therefore, suggests that to understand links between safety culture and high-quality health care, more complex, triangulated, and nuanced methods of acquiring information are needed than simply relying upon a single method and using only self-reported data. How this might be accomplished is considered further below.

Use of qualitative methods

The MaPSaF was the only widely-used tool identified that utilised qualitative methods of assessment. Circumstances other than safety culture may influence participant responses; for example, employee discontent; staff changes and effect on staff morale (16). Qualitative methods have capacity to uncover background influences on participant opinion, to account for their influence, and further untangle some of the influences on perceptions of safety culture.

While qualitative methods give potential to reveal individuals' assumptions, values and beliefs, data collection and analysis are time consuming, making them impractical for use in a time-constrained assessment process. Additionally, qualitative data requires complex analysis that does not easily indicate change over time. While it is a suitable method to use within a unit or service, as achieved with the MaPSaF, the findings of qualitative data alone do not allow easy comparison between healthcare organisations. As such, qualitative evaluations used on their own are an impractical source of safety culture information within an accreditation assessment.

Use of mixed method assessment

Mixed method assessment of healthcare safety culture has long been advocated (2, 5, 11, 54). Mixed methods combine the strengths of qualitative and quantitative research, '... to fully capture what safety culture consists of or how it can be managed more effectively to improve patient safety' (54). Nevertheless, it is only recently that mixed method evaluations of safety culture have been conducted. Listyowardojo et al (2017) (60) used the SAQ, followed by interviews, to assess safety culture in a single hospital unit. More broadly, Roney (2017) (61) used surveys to assess incident reporting by nurse clinical educators and students, followed by a focus group to discuss participants' experiences of safety culture in nine acute care hospitals. Although participant and site numbers were low, these studies suggest the *sequential* implementation of mixed methods evaluations; that is, conducting the qualitative component to explore the issues revealed by the quantitative component, are of benefit (62).

Applying safety culture assessment in accreditation of health service organisations.

Ginsburg et al (2009) considered the implications for using survey data as part of an accreditation process to measure patient safety culture (5). They made three recommendations:

- Surveys achieve response rates of over 70%
- Assessors focus on data for comparison *within* organisations
- Assessors '...engage in qualitative discussions of the survey results' to ascertain how well the survey data represents the organisation, before any improvement programs are initiated.

Ginsberg et al (5) also recommended that all staff within an organisation should be invited to participate in the assessment, to give a representative sample of the organisation across different departments and professions.

These recommendations lead us to two questions. First, what aspects of safety culture would an ideal safety culture tool assess? And second, how could safety culture assessment be achieved on a large-scale or national level? Answers to these questions are considered below.

What dimensions should a safety culture tool assess?

The ideal safety culture assessment tool would comprise dimensions that are relevant to the healthcare organisations under assessment, while providing information sought by assessors. Thus, the first question may be answered in part by considering the dimensions we have identified from review across the shortlisted tools (Table 1). Comparison reveals the commonalities between the tools, as well as variations in their focus on various aspects of safety culture. For example, tools such as the PSCHO place heavy emphasis on assessing leadership, while others, such as the SAQ, focus more on individual staff characteristics and perceptions. Tools should suitably assess constructs that are relevant to today's workforce and influence safety culture, such as work-life balance and burnout, featured in the SCORE (63). Comparison of tool items and subscales confirms that while no single tool can assess every aspect of safety culture, the consistency between tools suggests that a comprehensive approach including the range of 10 dimensions, perhaps through the integration of subscales from different tools, would provide greater understanding of the organisation under assessment (see Appendices to compare tool items).

Recommendations from safety culture tool development research also provide insight into ideal tool content and structure. The use of mixed methods (54, 60) to allow comprehensive assessment is advised. Qualitative questions that are driven by the survey data, rather than using predetermined questions, could ameliorate the limitations of survey data by uncovering the gaps

and exploring issues relevant to the organisation's safety culture at that point in time. However, the size of the qualitative component is constrained by the need for brevity, to reduce respondent burden and ensure adequate response rates (5, 15). Listyowardojo et al (2017) study provide a small-scale example of how this might be achieved (60).

How could safety culture be assessed at a national level?

The second question of large-scale implementation is more challenging to address. Tools must be specific to the care setting, but also flexible enough to evaluate all aspects of safety culture both within and between a variety of healthcare settings. While qualitative assessment tools, such as the MaPSaF, are unsuitable for large-scale comparisons between healthcare organisations, three of the survey tools have been demonstrated to allow comparison between large numbers of sites across a range of settings: PSCHO (43, 47, 64); HSPOSC (36); and SAQ (65).

The context-specific nature of healthcare settings and their safety culture challenges large-scale assessment and implementation of change. Responses received from the Australian hospitals contacted for this review revealed that organisations use a variety of means to assess safety culture. We note that these hospitals most frequently reported use of the SAQ, or in-house adaptations of this survey. Even so, it is unknown if the data currently collected by Australian hospitals more broadly comprehensively and specifically assesses safety culture, or the related domains of workplace culture and safety incidents. Additionally, knowing whether the data collected, methods used, and means of analysis and reporting bears resemblance between healthcare organisations becomes a stumbling block to cross-sector evaluation. An understanding of the commonalities between healthcare settings, and allowance for the differences, could provide the basis for a complex, but sensitive, method for comparison within and between entities.

5. Recommendations

Although no individual tool appears able to comprehensively evaluate all important dimensions of safety culture for the purposes of accreditation, this goal could potentially be achieved by different means. One of two suggested approaches could be helpful to create a comprehensive and reliable method for assessing safety culture on a national scale. These approaches comprise the development of a purpose-specific assessment battery that includes mixed method assessment; or alternatively, implementation of a prescriptive evaluation plan, to ensure healthcare organisations collect a minimum standard of safety culture data. The following section describes these in more detail.

Approach 1: Mixed method assessment package

This approach involves the development of an assessment package that uses a mixed method approach to data collection and analysis. Combining a well-validated and widely used survey, such as the SAQ, with a well-researched form of qualitative data, such as focus groups with key informants, optimises the strengths of both forms of assessment. The strengths and weaknesses of each survey tool, as summarised in Table 1, indicate a trade-off between validated content and context-specific information when implementing a standardised survey tool. Using the qualitative component to expand on specific survey results promotes an assessment that is both standardised and tailored to the organisation being surveyed. Ideally, quantitative data collection would occur before the accreditation assessment period; that is, a survey conducted, analysed and reported by the healthcare organisation prior to an accreditation assessment. Report findings would indicate areas for follow up using qualitative assessment during the accreditation period, conducted by accreditation surveyors. Analysis of qualitative data could be completed by the accreditation organisation for the final accreditation report.

An amalgamated tool that measures all 10 dimensions of safety culture with independent subscales could also be compiled to achieve large-scale safety culture assessment. However, validation of this amalgamated tool in its entirety would be required.

Approach 2: Prescriptive assessment plan

A prescribed evaluation plan could be a process or framework that is used to optimise and standardise the way safety culture data is currently collected, analysed and reported. As hospitals already assess safety culture in diverse ways, a process that allows healthcare organisations to compile safety culture data from tools they already use could be a pragmatic benefit. The difficulty is in ensuring that the organisations are collecting comparable information that aligns with the stated purpose of including safety culture assessment as part of accreditation. As data may come

from one or more assessment sources, this approach would require strong communication between the healthcare organisation and accreditation surveyors.

An evaluation plan should identify what information is collected, how it is collected, and how change could be implemented following the results of the evaluation. Optimally, the safety culture dimensions that are assessed would correspond with those in common with the validated survey tools, summarised in Table 1, to ensure organisations collect information on safety culture. Table 3 illustrates how this evaluation might look:

Table 3: Prescriptive evaluation plan

Dimensions to be assessed	How does your organisation assess these dimensions?	What are the indicators for change to safety culture in your organisation?	How could improvement in these areas be achieved?
1. Leadership for safety culture			
2. Systems, processes and procedures			
3. Resources			
4. Team relationships			
5. Communication			
6. Learning			
7. Impact of safety culture on staff (e.g., job satisfaction, stress)			
8. Awareness of safety culture			
9. Prioritising safety			
10. Safety issues witnessed/reported			

6. Conclusion

For the purposes of national accreditation, no single tool appears to comprehensively evaluate the values, beliefs, rules, norms and language of a healthcare organisation. Additionally, none covers all the identified dimensions of safety culture, or assesses the impact of safety culture on delivery of high quality patient care. Even so, the common strengths of the published tools used as part of a mixed method assessment may provide the basis on which to build a safety culture assessment package to determine the impact of safety culture on the delivery of high-quality patient care.

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List of abbreviations

ACSQHC	Australian Commission on Safety and Quality in Health Care
HSOPS	The Hospital Survey on Patient Safety Culture survey
MaPSaF	The Manchester Patient Safety Framework
MSI	Modified Stanford Instrument
PSCHO	Patient Safety Climate in Healthcare Organisations survey
SAQ	Safety Attitudes Questionnaire
SCORE	Safety, Communication, Operational Reliability and Engagement survey
SCSc	The Safety Climate Scale
SCSu	The Safety Climate Survey
UK	United Kingdom
US	United States
Victorian SCS	The Victorian Safety Climate Survey

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Appendices

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Appendix 1 – SAQ

Safety Attitudes: Frontline Perspectives from this Patient Care Area

I work in the (clinical area or patient care area where you typically spend your time): _____ This is in the Department of: _____ Please complete this survey with respect to your experiences in this clinical area.

- Use number 2 pencil only.
- Erase cleanly any mark you wish to change.

Correct Mark ● Incorrect Marks ✓ ✗ ◒ ◔

Please answer the following items with respect to your specific unit or clinical area. Choose your responses using the scale below:

A	B	C	D	E	X
Disagree Strongly	Disagree Slightly	Neutral	Agree Slightly	Agree Strongly	Not Applicable

Not Applicable
Agree Strongly
Agree Slightly
Neutral
Disagree Slightly
Disagree Strongly

1. Nurse input is well received in this clinical area.			
2. In this clinical area, it is difficult to speak up if I perceive a problem with patient care.			
3. Disagreements in this clinical area are resolved appropriately (i.e., not *who* is right, but *what* is best for the patient).			
4. I have the support I need from other personnel to care for patients.			
5. It is easy for personnel here to ask questions when there is something that they do not understand.			
6. The physicians and nurses here work together as a well-coordinated team.			
7. I would feel safe being treated here as a patient.			
8. Medical errors are handled appropriately in this clinical area.			
9. I know the proper channels to direct questions regarding patient safety in this clinical area.			
10. I receive appropriate feedback about my performance.			
11. In this clinical area, it is difficult to discuss errors.			
12. I am encouraged by my colleagues to report any patient safety concerns I may have.			
13. The culture in this clinical area makes it easy to learn from the errors of others.			
14. My suggestions about safety would be acted upon if I expressed them to management.			
15. I like my job.			
16. Working here is like being part of a large family.			
17. This is a good place to work.			
18. I am proud to work in this clinical area.			
19. Morale in this clinical area is high.			
20. When my workload becomes excessive, my performance is impaired.			
21. I am less effective at work when fatigued.			
22. I am more likely to make errors in tense or hostile situations.			
23. Fatigue impairs my performance during emergency situations (e.g. emergency resuscitation, seizure).			
24. Management supports my daily efforts:	Unit Mgt A B C D E X	Hosp Mgt	A B C D E X
25. Management doesn't knowingly compromise pt safety:	Unit Mgt A B C D E X	Hosp Mgt	A B C D E X
26. Management is doing a good job:	Unit Mgt A B C D E X	Hosp Mgt	A B C D E X
27. Problem personnel are dealt with constructively by our:	Unit Mgt A B C D E X	Hosp Mgt	A B C D E X
28. I get adequate, timely info about events that might affect my work, from:	Unit Mgt A B C D E X	Hosp Mgt	A B C D E X
29. The levels of staffing in this clinical area are sufficient to handle the number of patients.			
30. This hospital does a good job of training new personnel.			
31. All the necessary information for diagnostic and therapeutic decisions is routinely available to me.			
32. Trainees in my discipline are adequately supervised.			
33. I experience good collaboration with nurses in this clinical area.			
34. I experience good collaboration with staff physicians in this clinical area.			
35. I experience good collaboration with pharmacists in this clinical area.			
36. Communication breakdowns that lead to delays in delivery of care are common.			

BACKGROUND INFORMATION

Have you completed this survey before? ○ Yes ○ No ○ Don't Know **Today's Date (month/year):**_____

Position: (mark only one)

- ○ Attending/Staff Physician
- ○ Fellow Physician
- ○ Resident Physician
- ○ Physician Assistant/Nurse Practitioner
- ○ Nurse Manager/Charge Nurse
- ○ Registered Nurse
- ○ Pharmacist
- ○ Therapist (RT, PT, OT, Speech)
- ○ Clinical Social Worker
- ○ Dietician/Nutritionist
- ○ Clinical Support (CMA, EMT, Nurses Aide, etc.)
- ○ Technologist/Technician (e.g., Surg., Lab, Rad.)
- ○ Admin Support (Clerk/Secretary/Receptionist)
- ○ Environmental Support (Housekeeper)
- ○ Other Manager (e.g., Clinic Manager)
- ○ Other:_____

Mark your gender: ○ Male ○ Female **Primarily** ○ Adult ○ Peds ○ Both

Years in specialty: ○ Less than 6 months ○ 6 to 11 mo. ○ 1 to 2 yrs ○ 3 to 4 yrs ○ 5 to 10 yrs ○ 11 to 20 yrs ○ 21 or more

Thank you for completing the survey - your time and participation are greatly appreciated.

PLEASE DO NOT WRITE IN THIS AREA

Mark Reflex® forms by Pearson NCS MW263511-1 321 HC99 Printed in U.S.A.

Appendix 2 – SCSu

QualityHealthCare.org

INSTITUTE FOR HEALTHCARE IMPROVEMENT

Date: _____

_____Safety Climate Survey

Survey Number: _____

Please answer the following items with respect to your specific unit or clinical area. Choose your responses using the scale below:

	A Disagree Strongly	B Disagree Slightly	C Neutral	D Agree Slightly	E Agree Strongly	X Not Applicable
1. The culture of this clinical area makes it easy to learn from the mistakes of others.						
2. Medical errors are handled appropriately in this clinical area.						
3. The senior leaders in my hospital listen to me and care about my concerns.						
4. The physician and nurse leaders in my areas listen to me and care about my concerns.						
5. Leadership is driving us to be a safety-centered institution.						
6. My suggestions about safety would be acted upon if I expressed them to management.						
7. Management/leadership does not knowingly compromise safety concerns for productivity.						
8. I am encouraged by my colleagues to report any safety concerns I may have.						
9. I know the proper channels to direct questions regarding patient safety.						
10. I receive appropriate feedback about my performance.						
11. I would feel safe being treated here as a patient.						
12. Briefing personnel before the start of a shift (i.e., to plan for possible contingencies) is an important part of safety.						
13. Briefings are common here.						
14. I am satisfied with the availability of clinical leadership (please respond to all three): Physician						
Nursing						
Pharmacy						
15. This institution is doing more for patient safety now, than it did one year ago.						
16. I believe that most adverse events occur as a result of multiple system failures, and are not attributable to one individual's actions.						
17. The personnel in this clinical area take responsibility for patient safety.						
18. Personnel frequently disregard rules or guidelines that are established for this clinical area.						
19. Patient safety is constantly reinforced as the priority in this clinical area.						

Have you ever completed this survey before?
❑ Yes ❑ No ❑ Don't Know

Job Position: (mark only one)
❑ Attending/Staff Physician
❑ Physician in Training
❑ Pharmacist
❑ Technician (e.g., EKG, Lab, Radiology)
❑ Staff Nurse
❑ Nurse Manager/Charge Nurse
❑ Respiratory Therapist
❑ Physical, Occupational, or Speech Therapist
❑ Dietician
❑ Support Associate
❑ Administrator
❑ Other

Experience in Position:
❑ < 6 months ❑ 6 to 11 months ❑ 1 to 2 yrs ❑ 3 to 7 yrs
❑ 8 to 12 yrs ❑ 13 to 20 yrs ❑ 21 yrs or over

Experience in Specialty:
❑ < 6 months ❑ 6 to 11 months ❑ 1 to 2 yrs ❑ 3 to 7 yrs
❑ 8 to 12 yrs ❑ 13 to 20 yrs ❑ 21 yrs or over

Experience in Organization:
❑ < 6 months ❑ 6 to 11 months ❑ 1 to 2 yrs ❑ 3 to 7 yrs
❑ 8 to 12 yrs ❑ 13 to 20 yrs ❑ 21 yrs or over

Age:
❑ < 30 ❑ 30 to 34 ❑ 35 to 39 ❑ 40 to 44 ❑ 45 or over

Unit (please write in title and/or location): _____

Thank you for completing the survey. Your time and participation are greatly appreciated.

Appendix 3 –Comparison of items from SCSu and SCSc

Table 1 Safety Climate Survey (SCSu), Safety Climate Scale (SCSc), and Safety Climate Mean (SCM) items used in the survey

	SCSu (22 items)	SCSc (13 items)	SCM (7 items)
(1) The culture of this clinical area makes it easy to learn from the mistakes of others.	×		
(2) Medical errors are handled appropriately in this clinical area.	×		×
(3) The senior leaders in my hospital listen to me and care about my concerns.	×	×	×
(4) The physician and clinical leaders in my areas listen to me and care about my concerns.	×	×	
(5) Leadership is driving us to be a safety centered institution.	×	×	
(6) My suggestions about safety would be acted upon if I expressed them to management.	×	×	
(7) Management/leadership does not knowingly compromise safety concerns for productivity.	×	×	
(8) I am encouraged by my colleagues to report any safety concerns I may have.	×	×	×
(9) I know the proper channels to direct questions regarding patient safety.	×	×	×
(10) I receive appropriate feedback about my performance.	×		×
(11) I would feel safe being treated here as a patient.	×		×
(12) Briefing personnel before the start of a shift is an important part of patient safety. (Briefing is defined as informal/formal communication regarding unit specifics, in order to plan for possible contingencies.)	×		
(13) Briefings are common here.	×		
(14) I am satisfied with the availability of physician clinical leadership.	×	×†	
(15) I am satisfied with the availability of nursing clinical leadership.	×	×†	
(16) I am satisfied with the availability of pharmacy clinical leadership.	×	×†	
(17) I am satisfied with the availability of registered respiratory care practitioner clinical leadership*	×	×†	
(18) This institution is doing more for patient safety now than it did 1 year ago.	×		
(19) I believe that most adverse events occur as a result of multiple system failures and are not attributable to one individual's actions.	×	×	
(20) The personnel in this clinical area take responsibility for patient safety.	×		
(21) Personnel frequently disregard rules or guidelines that are established for this clinical area.	×		×
(22) Patient safety is constantly reinforced as the priority in this clinical area.	×		
(23) I am aware that patient safety has become a major area for improvement in this institution.		×	

This table compares the items included in each of the three instruments used in the survey. Respondents rated each item on a 5-point scale with higher scores reflecting a more positive safety climate.
SCSu, Safety Climate Survey; SCSc, Safety Climate Scale; SCM, Safety Climate Mean; ×, item included in scale.
*Item added to reflect the staffing structure.
†This item was combined as one item in the SCSc.

Appendix 4 – Victorian SCS – long form

Safety Climate Survey

A Staff Survey for Measuring Patient Safety

This survey asks about your perceptions and experiences of patient safety in your health service. There are no right or wrong answers; it is your opinion that counts. The survey is anonymous. All responses will be treated confidentially and no individual will be identified.

This survey is designed to be completed by selected staff members who work in, or for, this health service. This includes medical and nursing staff, other health professionals, management, administration, support staff, technical staff, and any other staff who support patient care. All views and opinions regarding patient safety are important, even if you are not involved in direct patient care.

Some definitions:

- **Patient:** client, resident or consumer in the health system;
- **Safety:** condition of being safe, free from danger, risk or injury;
- **Error:** any mistake in the delivery of care by any staff member regardless of the outcome.

Please respond to each statement by placing a cross **(not a tick)** in the appropriate box.

Think about the health service area or unit you work in most when rating your level of agreement with the following statements. **Place a cross in the appropriate box.**	Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Not Applicable 6
1. I would feel safe being treated here as a patient.						
2. I like my job.						
3. High levels of workload are common in my work area.						
4. Errors are handled appropriately in my work area.						
5. This health service does a good job of training new personnel.						
6. All the necessary information for important decisions is routinely available to me.						
7. Working in this health service is like being part of a large family.						
8. Nurse input is well received in my work area.						
9. The management of this health service is doing a good job.						
10. Health service management supports my daily efforts.						
11. I receive appropriate feedback about my performance.						
12. In my work area, it is difficult to discuss errors.						
13. Clinical handover is common in my work area.						
14. This health service is a good place to work.						

Appendix 4 – Victorian SCS – long form, continued

Think about the health service area or unit you work in most when rating your level of agreement with the following statements. **Place a cross in the appropriate box.**	Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Not Applicable 6
15. All the personnel in my work area take responsibility for patient safety.						
16. The levels of staffing in my work area are sufficient to handle the number of patients.						
17. Decision making in my work area frequently utilises input from relevant personnel.						
18. This health service encourages teamwork and cooperation among its personnel.						
19. I am encouraged by my colleagues to report any patient safety concerns I may have.						
20. The culture in my work area makes it easy to learn from the errors of others.						
21. This health service deals constructively with problem staff/personnel.						
22. The equipment in my work area is adequate.						
23. In my work area, it is difficult to speak up if I perceive a problem with patient care.						
24. When my workload becomes excessive, my performance is impaired.						
25. I am provided with adequate, timely information about events in the health service that might affect my work.						
26. I have seen others make errors that had the potential to harm patients.						
27. I know the proper channels to direct questions regarding patient safety.						
28. I am proud to work at this health service.						
29. Disagreements in my work area are resolved appropriately (i.e. not who is right, but what is best for the patient).						
30. I am less effective at work when fatigued.						
31. I am more likely to make errors in hostile or tense situations.						
32. Stress from personal problems adversely affects my performance.						
33. I have the support I need from other personnel to care for patients.						
34. It is easy for personnel in my work area to ask questions when there is something that they do not understand.						
35. Disruptions in the continuity of care (e.g. shift changes, patient transfers etc.) can be detrimental to patient safety.						
36. The doctors and nurses in this health service work together as a well-coordinated team.						
37. I am frequently unable to express disagreement with doctors.						
38. Morale in my work area is high.						
39. Trainees in my discipline are adequately supervised.						
40. I know the first and last names of all the personnel I worked with during my last shift.						
41. Overall, staff/personnel in my work area are doing a good job.						
42. Fatigue impairs my performance during emergency situations.						
43. Patient safety is constantly reinforced as the priority in my work area.						
44. Important issues are well communicated at shift changes/handovers.						
45. There is widespread adherence to clinical guidelines and evidence-based criteria regarding patient safety here.						
46. Information obtained through incident reports is used to make patient care safer in my work area.						
47. Personnel frequently disregard rules or policies (e.g. treatment protocols/clinical pathways, sterile field, etc.) that are established for my work area.						

Appendix 4 – Victorian SCS – long form, continued

Think about the health service area or unit you work in most when rating your level of agreement with the following statements. **Place a cross in the appropriate box.**	Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Not Applicable 6
48. Communication breakdowns which lead to delays in delivery of care are common at this health service.						
49. My suggestions about safety would be acted upon if I expressed them to management.						
50. The management in my work area supports my daily efforts.						
51. This health service is doing more for patient safety now, than it did one year ago.						
52. I am satisfied with the quality of collaboration that I experience with nurses in my work area.						
53. Briefing other personnel before the start of a shift or before a procedure is an important part of patient safety.						
54. I may not submit an incident report because I will be identified.						
55. I know how to report errors that happen in my work area.						
56. Leadership is driving us to be a safety-centered organisation.						
57. Personnel are not disciplined for errors reported through incident reports.						
58. The senior leaders in my health service listen to me and care about my concerns.						
59. Communication breakdowns which negatively affect patient care are common.						
60. Executive management does not knowingly compromise the safety of patients.						
61. Line managers in my work area do not knowingly compromise the safety of patients.						
62. Medication errors are handled appropriately at this health service.						
63. I frequently observe health service staff washing their hands between attending patients.						
64. I would recommend working at this health service to family, friends and colleagues.						
65. This health service has systems and procedures that are good at preventing errors from happening						
66. We are actively doing things to improve patient safety in my work area.						
67. People support each other in my work area.						
68. I am satisfied with the level of patient safety at this health service.						
69. This health service provides adequate patient safety education and training.						
70. I am often required to work outside the area of my training/specialty.						
71. I have access to the equipment I need to perform my role safely.						
72. Open disclosure is routinely practiced in this health service.						
73. A patient has the right to know if an error has been made in their care						
74. My health service delivers patient and family-centred care supported by policy						

75. What are three (3) ways in which your health service can improve patient safety?

1. .....

2. .....

3. .....

Appendix 4 – Victorian SCS – long form, continued

Demographic Survey

We are collecting some demographic information, however, we will ensure that no individual is identified and all responses are treated confidentially. All reporting will be on de-identified data at the aggregate level only.

What is your gender?

- ☐ Female
- ☐ Male

Are you employed by this health service?

- ☐ Yes
- ☐ No (e.g. contractor)

What is your employment status?

- ☐ Full time
- ☐ Part time
- ☐ Casual / temporary

How is your job level best described?
(please mark one only)

- ☐ Executive
- ☐ Management
- ☐ Supervisor / Shift Manager
- ☐ Team Member

What is your age range?

- ☐ Less than 24 years
- ☐ 25 to 29 years
- ☐ 30 to 34 years
- ☐ 35 to 39 years
- ☐ 40 to 44 years
- ☐ 45 to 49 years
- ☐ 50 to 54 years
- ☐ 55 to 59 years
- ☐ 60 to 65 years
- ☐ More than 65 years

How is your current role best described?
(please mark one only)

- ☐ Administration / Clerical
- ☐ Allied Health Professional
- ☐ Doctor / HMO / VMO
- ☐ Nurse
- ☐ Hotel Services / Environmental
- ☐ PCA (Personal Care Attendant)
- ☐ Other (please specify): _____

What health service area, unit or department do you work in most?
(please mark one only)

- ☐ Allied Health
- ☐ Emergency
- ☐ Genera Ward
- ☐ Intensive Care Unit (ICU)
- ☐ Other (please specify): _____
- ☐ Maternity & Neonatal
- ☐ Mental Health
- ☐ Outpatient
- ☐ Paediatric
- ☐ Patient support services / Administration
- ☐ Pharmacy
- ☐ Residential / Aged Care
- ☐ Surgery / Theatre / Peri-operative services

How long have you worked in this health service?

- ☐ Less than 3 months
- ☐ 4 to 11 months
- ☐ 1 to 2 years
- ☐ 3 to 5 years
- ☐ 6 to 9 years
- ☐ 10 to 19 years
- ☐ 20 to 29 years
- ☐ 30 or more years

How long have you worked in your current role?

- ☐ Less than 3 months
- ☐ 4 to 11 months
- ☐ 1 to 2 years
- ☐ 3 to 5 years
- ☐ 6 to 9 years
- ☐ 10 to 19 years
- ☐ 20 to 29 years
- ☐ 30 or more years

Please return to [return address] by [closing date].

Appendix 4 – Victorian SCS - short form

Safety Climate Survey

A Staff Survey for Measuring Patient Safety

This survey asks about your perceptions and experiences of patient safety in your health service. There are no right or wrong answers; it is your opinion that counts. The survey is anonymous. All responses will be treated confidentially and no individual will be identified.

This survey is designed to be completed by selected staff members who work in, or for, this health service. This includes medical and nursing staff, other health professionals, management, administration, support staff, technical staff, and any other staff who support patient care. All views and opinions regarding patient safety are important, even if you are not involved in direct patient care.

Some definitions:

- **Patient:** client, resident or consumer in the health system;
- **Safety:** condition of being safe, free from danger, risk or injury;
- **Error:** any mistake in the delivery of care by any staff member regardless of the outcome.

Please respond to each statement by placing a cross **(not a tick)** in the appropriate box.

Think about the health service area or unit you work in most when rating your level of agreement with the following statements. **Place a cross in the appropriate box.**	Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Not Applicable 6
1. I would feel safe being treated here as a patient.						
2. I like my job.						
3. Errors are handled appropriately in my work area.						
4. This health service does a good job of training new personnel.						
5. All the necessary information for important decisions is routinely available to me.						
6. Working in this health service is like being part of a large family.						
7. Nurse input is well received in my work area.						
8. Health service management supports my daily efforts.						
9. I receive appropriate feedback about my performance.						
10. In my work area, it is difficult to discuss errors.						
11. Clinical hancover is common in my work area.						
12. This health service is a good place to work.						
13. The levels of staffing in my work area are sufficient to handle the number of patients.						
14. Decision making in my work area frequently utilizes input from relevant personnel.						
15. I am encouraged by my colleagues to report any patient safety concerns I may have.						

Appendix 4 – Victorian SCS - short form, continued

Think about the health service area or unit you work in most when rating your level of agreement with the following statements. **Place a cross in the appropriate box.**	Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Not Applicable 6
16. The culture in my work area makes it easy to learn from the errors of others.						
17. This health service deals constructively with problem staff/personnel.						
18. In my work area, it is difficult to speak up if I perceive a problem with patient care.						
19. When my workload becomes excessive, my performance is impaired.						
20. I am provided with adequate, timely information about events in the health service that might affect my work.						
21. I know the proper channels to direct questions regarding patient safety.						
22. I am proud to work at this health service.						
23. Disagreements in my work area are resolved appropriately (i.e. not who is right, but what is best for the patient).						
24. I am less effective at work when fatigued.						
25. I am more likely to make errors in hostile or tense situations.						
26. I have the support I need from other personnel to care for patients.						
27. It is easy for personnel in my work area to ask questions when there is something that they do not understand.						
28. The doctors and nurses in this health service work together as a well-coordinated team.						
29. I am frequently unable to express disagreement with doctors.						
30. Morale in my work area is high.						
31. Trainees in my discipline are adequately supervised.						
32. I know the first and last names of all the personnel I worked with during my last shift.						
33. Fatigue impairs my performance during emergency situations.						
34. Important issues are well communicated at shift changes/handovers.						
35. Personnel frequently disregard rules or policies (e.g. treatment protocols/clinical pathways, sterile field, etc.) that are established for my work area.						
36. My suggestions about safety would be acted upon if I expressed them to management.						
37. This health service is doing more for patient safety now, than it did one year ago.						
38. I am satisfied with the quality of collaboration that I experience with nurses in my work area.						
39. Briefing other personnel before the start of a shift or before a procedure is an important part of patient safety.						
40. Leadership is driving us to be a safety-centered organisation.						
41. Executive management does not knowingly compromise the safety of patients.						
42. Line managers in my work area do not knowingly compromise the safety of patients.						

43. What are three (3) ways in which your health service can improve patient safety?

1.

2.

3.

Appendix 4 – Victorian SCS - short form, continued

Demographic Survey

We are collecting some demographic information, however, we will ensure that no individual is identified and all responses are treated confidentially. All reporting will be on de-identified data at the aggregate level only.

What is your gender?

- ☐ Female
- ☐ Male

Are you employed by this health service?

- ☐ Yes
- ☐ No (e.g. contractor)

What is your employment status?

- ☐ Full time
- ☐ Part time
- ☐ Casual / temporary

How is your job level best described?
(please mark one only)

- ☐ Executive
- ☐ Management
- ☐ Supervisor / Shift Manager
- ☐ Team Member

What is your age range?

- ☐ Less than 24 years
- ☐ 25 to 29 years
- ☐ 30 to 34 years
- ☐ 35 to 39 years
- ☐ 40 to 44 years
- ☐ 45 to 49 years
- ☐ 50 to 54 years
- ☐ 55 to 59 years
- ☐ 60 to 65 years
- ☐ More than 65 years

How is your current role best described?
(please mark one only)

- ☐ Administration / Clerical
- ☐ Allied Health Professional
- ☐ Doctor / HMO / VMO
- ☐ Nurse
- ☐ Hotel Services / Environmental
- ☐ PCA (Personal Care Attendant)
- ☐ Other (please specify): _____

What health service area, unit or department do you work in most?
(please mark one only)

- ☐ Allied Health
- ☐ Emergency
- ☐ General Ward
- ☐ Intensive Care Unit (ICU)
- ☐ Maternity & Neonatal
- ☐ Mental Health
- ☐ Outpatient
- ☐ Paediatric
- ☐ Patient support services / Administration
- ☐ Pharmacy
- ☐ Residential / Aged Care
- ☐ Surgery / Theatre / Peri-operative services
- ☐ Other (please specify): _____

How long have you worked in this health service?

- ☐ Less than 3 months
- ☐ 4 to 11 months
- ☐ 1 to 2 years
- ☐ 3 to 5 years
- ☐ 6 to 9 years
- ☐ 10 to 19 years
- ☐ 20 to 29 years
- ☐ 30 or more years

How long have you worked in your current role?

- ☐ Less than 3 months
- ☐ 4 to 11 months
- ☐ 1 to 2 years
- ☐ 3 to 5 years
- ☐ 6 to 9 years
- ☐ 10 to 19 years
- ☐ 20 to 29 years
- ☐ 30 or more years

Please return to [return address] by [closing date].

Appendix 5 – SCORE survey

Full copy of SCORE Below

SCORE: Assessment of your work setting

Safety, Communication, Operational Reliability, and Engagement

Please answer the following items with respect to your specific unit or clinical area. Choose your responses using the scale below:

A	B	C	D	E	X
Disagree Strongly	Disagree Slightly	Neutral	Agree Slightly	Agree Strongly	Not Applicable

Improvement Readiness (Learning Environment)	
The learning environment in this work setting utilizes input/suggestions from the people who work here.	A B C D E X
The learning environment in this work setting integrates lessons learned from other work settings.	A B C D E X
The learning environment in this work setting effectively fixes defects to improve the quality of what we do.	A B C D E X
The learning environment in this work setting allows us to gain important insights into what we do well.	A B C D E X
The learning environment in this work setting is protected by our local management.	A B C D E X
Local Leadership	
In this work setting local management is available at predictable times.	A B C D E X
In this work setting local management regularly makes time to provide **positive feedback** to me about how I am doing.	A B C D E X
In this work setting local management provides frequent feedback about my performance.	A B C D E X
In this work setting local management provides useful feedback about my performance.	A B C D E X
In this work setting local management communicates their expectations to me about my performance.	A B C D E X
Burnout Climate and Personal Burnout	
Events in this work setting affect the lives of people here in an emotionally unhealthy way.	A B C D E X
People in this work setting are burned out from their work.	A B C D E X
People in this work setting are fatigued from their work.	A B C D E X
People in this work setting are frustrated by their jobs.	A B C D E X
People in this work setting are working too hard on their jobs.	A B C D E X
Events in this work setting affect my life in an emotionally unhealthy way.	A B C D E X
I feel burned out from my work.	A B C D E X
I feel fatigued when I get up in the morning and have to face another day on the job.	A B C D E X
I feel frustrated by my job.	A B C D E X
I feel I am working too hard on my job.	A B C D E X
In the past month, my activities have been restricted due to illness.	A B C D E X
In the past month, I have missed work (for any reason).	A B C D E X
Teamwork Climate	
Disagreements in this work setting are appropriately resolved (i.e., not *who* is right but *what* is best for the patient).	A B C D E X
In this work setting, it is difficult to speak up if I perceive a problem with patient care.	A B C D E X
It is easy for personnel here to ask questions when there is something that they do not understand.	A B C D E X
The people here from different disciplines/backgrounds work together as a well-coordinated team.	A B C D E X
Dealing with difficult colleagues is consistently a challenging part of my job.	A B C D E X
Communication breakdowns are common in this work setting.	A B C D E X
Communication breakdowns are common when this work setting interacts with other work settings.	A B C D E X

Appendix 5 – SCORE survey, continued

Safety Climate	
My suggestions about quality would be acted upon if I expressed them to management.	A B C D E X
Errors are handled appropriately in this work setting.	A B C D E X
I receive appropriate feedback about my performance.	A B C D E X
The culture in this work setting makes it easy to learn from the errors of others.	A B C D E X
I would feel safe being treated here as a patient.	A B C D E X
In this work setting, it is difficult to discuss errors.	A B C D E X
The values of facility leadership are the same values that people in this work setting think are important.	A B C D E X

A	B	C	D	E	X
Disagree Strongly	Disagree Slightly	Neutral	Agree Slightly	Agree Strongly	Not Applicable

With respect to the ***growth opportunities*** in this work setting I have	With respect to the ***workload*** in this work setting I have
opportunities for personal growth/development	too much work to do
the feeling that I can achieve something	to work under time pressure
opportunities for independent thought and action	to attend to many things at the same time
freedom in carrying out work activities	to give continuous attention to work
influence in the planning work activities	to remember many things
influence in decisions about work activity timelines	
With respect to the participation in decision making that I experience here	
the decision making process is clear to me	I can participate in decisions about the nature of my work
it is clear to whom I should address specific problems	I have a direct influence on my organization's decisions
I can discuss work problems with my direct supervisor/ physician leadership	this organization utilizes input from staff about technology initiatives
With respect to *advancement* in this organization	
I can live comfortably on my pay	
this organization pays good salaries	
I am paid enough for the work I do	
I have opportunities to progress financially	
I have opportunities to advance through training courses	
I have opportunities to be promoted	
I am satisfied with my total benefits package	

DURING THE PAST WEEK, HOW OFTEN DID THIS OCCUR?

A	*B*	*C*	*D*	*X*
Rarely or none of the time (less than 1 day)	**Some or a little of the time** (1-2 days)	**Occasionally or a moderate amount of time** (3-4 days)	**All of the time** (5-7 days)	***Not Applicable***

Skipped a meal	A	B	C	D	X	Had difficulty sleeping	A	B	C	D	X
Ate a poorly balanced meal	A	B	C	D	X	Slept less than 5 hours in a night	A	B	C	D	X
Worked through a day/shift without any breaks	A	B	C	D	X	Changed personal/family plans because of work	A	B	C	D	X
Arrived home late from work	A	B	C	D	X	Felt frustrated by technology	A	B	C	D	X

Does your work setting use Patient Safety Leadership WalkRounds to discuss with senior leaders any issues that could harm patients or undermine the safe delivery of care? Yes No Not Sure | How often did you participate? 0 1 2 3-4 5-7 8 or more Not Sure
Did you receive feedback about patient safety risks that were reduced as a result of WalkRounds? Yes No Not Sure

Appendix 5 – SCORE survey, continued

Background Information

Have you completed this survey before (circle one)? Yes / No / Don't Know **Gender:** Male Female **Primarily:** Adult Peds Both

Shift Length: 8hrs 10hrs 12hrs Other

Position: (mark only one)

O Attending/Staff Physician	O Pharmacist	O Technician (e.g., Surg., Lab, Rad.)
O Fellow Physician	O Therapist (RT, PT, OT, Speech)	O Admin Support (Clerk/Secretary/Receptionist)
O Resident Physician	O Clinical Social Worker	O Environmental Support (Housekeeper)
O Physician Assistant/Nurse Practitioner	O Dietician/Nutritionist	O Other Manager (e.g., Clinic Manager)
O Nurse Manager/Charge Nurse	O Clinical Support (CMA, EMT, Nurses Aide, etc.)	O Other:_____
O Registered Nurse	O Technologist	

Years in Specialty: Less than 6 months 6 to 11 mos. 1 to 2 years 3 to 4 years 5 to 10 years 11 to 20 years 21 years or more

Thank you for completing the survey – your time and participation are greatly appreciated!

Appendix 6 – HSOPS

Hospital Survey on Patient Safety

Instructions

This survey asks for your opinions about patient safety issues, medical error, and event reporting in your hospital and will take about 10 to 15 minutes to complete.

If you do not wish to answer a question, or if a question does not apply to you, you may leave your answer blank.

- *An **"event"** is defined as any type of error, mistake, incident, accident, or deviation, regardless of whether or not it results in patient harm.*
- ***"Patient safety"** is defined as the avoidance and prevention of patient injuries or adverse events resulting from the processes of health care delivery.*

SECTION A: Your Work Area/Unit

In this survey, think of your "unit" as the work area, department, or clinical area of the hospital where you spend *most* of your work time or provide *most* of your clinical services.

What is your primary work area or unit in this hospital? Select ONE answer.

- ☐ a. Many different hospital units/No specific unit
- ☐ b. Medicine (non-surgical)
- ☐ c. Surgery
- ☐ d. Obstetrics
- ☐ e. Pediatrics
- ☐ f. Emergency department
- ☐ g. Intensive care unit (any type)
- ☐ h. Psychiatry/mental health
- ☐ i. Rehabilitation
- ☐ j. Pharmacy
- ☐ k. Laboratory
- ☐ l. Radiology
- ☐ m. Anesthesiology
- ☐ n. Other, please specify: _____

Please indicate your agreement or disagreement with the following statements about your work area/unit.

Think about your hospital work area/unit…	Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼
1. People support one another in this unit	☐1	☐2	☐3	☐4	☐5
2. We have enough staff to handle the workload	☐1	☐2	☐3	☐4	☐5
3. When a lot of work needs to be done quickly, we work together as a team to get the work done	☐1	☐2	☐3	☐4	☐5
4. In this unit, people treat each other with respect	☐1	☐2	☐3	☐4	☐5
5. Staff in this unit work longer hours than is best for patient care	☐1	☐2	☐3	☐4	☐5

Appendix 6 – HSOPS, continued

SECTION A: Your Work Area/Unit (continued)

Think about your hospital work area/unit…	Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼
6. We are actively doing things to improve patient safety	☐1	☐2	☐3	☐4	☐5
7. We use more agency/temporary staff than is best for patient care	☐1	☐2	☐3	☐4	☐5
8. Staff feel like their mistakes are held against them	☐1	☐2	☐3	☐4	☐5
9. Mistakes have led to positive changes here	☐1	☐2	☐3	☐4	☐5
10. It is just by chance that more serious mistakes don't happen around here	☐1	☐2	☐3	☐4	☐5
11. When one area in this unit gets really busy, others help out	☐1	☐2	☐3	☐4	☐5
12. When an event is reported, it feels like the person is being written up, not the problem	☐1	☐2	☐3	☐4	☐5
13. After we make changes to improve patient safety, we evaluate their effectiveness	☐1	☐2	☐3	☐4	☐5
14. We work in "crisis mode" trying to do too much, too quickly	☐1	☐2	☐3	☐4	☐5
15. Patient safety is never sacrificed to get more work done	☐1	☐2	☐3	☐4	☐5
16. Staff worry that mistakes they make are kept in their personnel file	☐1	☐2	☐3	☐4	☐5
17. We have patient safety problems in this unit	☐1	☐2	☐3	☐4	☐5
18. Our procedures and systems are good at preventing errors from happening	☐1	☐2	☐3	☐4	☐5

SECTION B: Your Supervisor/Manager

Please indicate your agreement or disagreement with the following statements about your immediate supervisor/manager or person to whom you directly report.

	Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼
1. My supervisor/manager says a good word when he/she sees a job done according to established patient safety procedures	☐1	☐2	☐3	☐4	☐5
2. My supervisor/manager seriously considers staff suggestions for improving patient safety	☐1	☐2	☐3	☐4	☐5
3. Whenever pressure builds up, my supervisor/manager wants us to work faster, even if it means taking shortcuts	☐1	☐2	☐3	☐4	☐5
4. My supervisor/manager overlooks patient safety problems that happen over and over	☐1	☐2	☐3	☐4	☐5

Appendix 6 – HSOPS, continued

SECTION C: Communications

How often do the following things happen in your work area/unit?

Think about your hospital work area/unit…	Never	Rarely	Some-times	Most of the time	Always
1. We are given feedback about changes put into place based on event reports	☐1	☐2	☐3	☐4	☐5
2. Staff will freely speak up if they see something that may negatively affect patient care	☐1	☐2	☐3	☐4	☐5
3. We are informed about errors that happen in this unit	☐1	☐2	☐3	☐4	☐5
4. Staff feel free to question the decisions or actions of those with more authority	☐1	☐2	☐3	☐4	☐5
5. In this unit, we discuss ways to prevent errors from happening again	☐1	☐2	☐3	☐4	☐5
6. Staff are afraid to ask questions when something does not seem right	☐1	☐2	☐3	☐4	☐5

SECTION D: Frequency of Events Reported

In your hospital work area/unit, when the following mistakes happen, *how often are they reported?*

	Never	Rarely	Some-times	Most of the time	Always
1. When a mistake is made, but is *caught and corrected before affecting the patient*, how often is this reported?	☐1	☐2	☐3	☐4	☐5
2. When a mistake is made, but has *no potential to harm the patient*, how often is this reported?	☐1	☐2	☐3	☐4	☐5
3. When a mistake is made that *could harm the patient*, but does not, how often is this reported?	☐1	☐2	☐3	☐4	☐5

SECTION E: Patient Safety Grade

Please give your work area/unit in this hospital an overall grade on patient safety.

☐	☐	☐	☐	☐
A Excellent	**B** Very Good	**C** Acceptable	**D** Poor	**E** Failing

SECTION F: Your Hospital

Please indicate your agreement or disagreement with the following statements about your hospital.

Think about your hospital…	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1. Hospital management provides a work climate that promotes patient safety	☐1	☐2	☐3	☐4	☐5
2. Hospital units do not coordinate well with each other	☐1	☐2	☐3	☐4	☐5
3. Things "fall between the cracks" when transferring patients from one unit to another	☐1	☐2	☐3	☐4	☐5
4. There is good cooperation among hospital units that need to work together	☐1	☐2	☐3	☐4	☐5

Appendix 6 – HSOPS, continued

SECTION F: Your Hospital (continued)

Think about your hospital...	Strongly Disagree ▼	Disagree ▼	Neither ▼	Agree ▼	Strongly Agree ▼
5. Important patient care information is often lost during shift changes	☐1	☐2	☐3	☐4	☐5
6. It is often unpleasant to work with staff from other hospital units	☐1	☐2	☐3	☐4	☐5
7. Problems often occur in the exchange of information across hospital units.....	☐1	☐2	☐3	☐4	☐5
8. The actions of hospital management show that patient safety is a top priority	☐1	☐2	☐3	☐4	☐5
9. Hospital management seems interested in patient safety only after an adverse event happens.....	☐1	☐2	☐3	☐4	☐5
10. Hospital units work well together to provide the best care for patients	☐1	☐2	☐3	☐4	☐5
11. Shift changes are problematic for patients in this hospital.....	☐1	☐2	☐3	☐4	☐5

SECTION G: Number of Events Reported

In the past 12 months, how many event reports have you filled out and submitted?

- ☐ a. No event reports
- ☐ b. 1 to 2 event reports
- ☐ c. 3 to 5 event reports
- ☐ d. 6 to 10 event reports
- ☐ e. 11 to 20 event reports
- ☐ f. 21 event reports or more

SECTION H: Background Information

This information will help in the analysis of the survey results.

1. How long have you worked in this hospital?

- ☐ a. Less than 1 year
- ☐ b. 1 to 5 years
- ☐ c. 6 to 10 years
- ☐ d. 11 to 15 years
- ☐ e. 16 to 20 years
- ☐ f. 21 years or more

2. How long have you worked in your current hospital work area/unit?

- ☐ a. Less than 1 year
- ☐ b. 1 to 5 years
- ☐ c. 6 to 10 years
- ☐ d. 11 to 15 years
- ☐ e. 16 to 20 years
- ☐ f. 21 years or more

3. Typically, how many hours per week do you work in this hospital?

- ☐ a. Less than 20 hours per week
- ☐ b. 20 to 39 hours per week
- ☐ c. 40 to 59 hours per week
- ☐ d. 60 to 79 hours per week
- ☐ e. 80 to 99 hours per week
- ☐ f. 100 hours per week or more

Appendix 6 – HSOPS, continued

SECTION H: Background Information (continued)

4. What is your staff position in this hospital? Select ONE answer that best describes your staff position.

- ☐ a. Registered Nurse
- ☐ b. Physician Assistant/Nurse Practitioner
- ☐ c. LVN/LPN
- ☐ d. Patient Care Asst/Hospital Aide/Care Partner
- ☐ e. Attending/Staff Physician
- ☐ f. Resident Physician/Physician in Training
- ☐ g. Pharmacist
- ☐ h. Dietician
- ☐ i. Unit Assistant/Clerk/Secretary
- ☐ j. Respiratory Therapist
- ☐ k. Physical, Occupational, or Speech Therapist
- ☐ l. Technician (e.g., EKG, Lab, Radiology)
- ☐ m. Administration/Management
- ☐ n. Other, please specify: _____

5. In your staff position, do you typically have direct interaction or contact with patients?

- ☐ a. YES, I typically have direct interaction or contact with patients.
- ☐ b. NO, I typically do NOT have direct interaction or contact with patients.

6. How long have you worked in your current specialty or profession?

- ☐ a. Less than 1 year
- ☐ b. 1 to 5 years
- ☐ c. 6 to 10 years
- ☐ d. 11 to 15 years
- ☐ e. 16 to 20 years
- ☐ f. 21 years or more

SECTION I: Your Comments

Please feel free to write any comments about patient safety, error, or event reporting in your hospital.

THANK YOU FOR COMPLETING THIS SURVEY.

Appendix 7 – MSI

MSI Patient Safety Culture in Healthcare Organizations Survey

Instructions:

- The survey is seeking your **perceptions and opinions** of these patient safety issues. Indicate the extent to which you agree or disagree with each of the following statements. If you are unsure whether you agree or disagree, mark "neutral". If the question does not apply to your role or your work setting, please mark "not applicable".

What do we mean by:

- Unit: Think of **unit** as the area where you spend *most* of your work or provide *most* of your clinical services —whether that is a patient care unit / ward, clinic, department., the community, EMS, etc.
- Supervisor manager: Think of the person to whom you directly report.
- Patient Safety: Activities to avoid, prevent, or correct adverse outcomes which may result from the delivery of health care.
- Serious Errors: During healthcare delivery many small mistakes occur. The majority of these have minimal consequences for staff and patients. However, there are also more serious errors which cause harm, disability and /or longer hospital stays. **Serious errors** are those that harm the patient or have the potential to cause harm.

A. In your staff position, do you typically have direct interaction or contact with patients?

- ❍ YES, I typically have direct interaction or contact with patients.
- ❍ NO, I typically do NOT have direct interaction or contact with patients → *THANK YOU, please return the survey without completing any additional questions.*

B. In what setting do you spend <u>most</u> of your work time:

- ❍ Acute in-patient
- ❍ Long term/continuing care
- ❍ Ambulatory clinic
- ❍ Community
- ❍ Many different settings/no specific setting

C. What is your primary work area? Select ONE answer.

- ❍ Many different hospital units/no specific unit
- ❍ Medicine (non-surgical)
- ❍ Surgery
- ❍ Obstetrics
- ❍ Pediatrics
- ❍ Emergency department
- ❍ Intensive care unit (any type)
- ❍ Psychiatry/mental health
- ❍ Rehabilitation
- ❍ Chronic care
- ❍ Pharmacy
- ❍ Laboratory
- ❍ Radiology
- ❍ Anesthesiology
- ❍ Other

D. Indicate the extent to which you agree or disagree with each of the following statements.	strongly disagree	disagree	neutral	agree	strongly agree	not applicable
1. Patient safety decisions are made at the proper level by the most qualified people	❍	❍	❍	❍	❍	❍
2. Good communication flow exists up the chain of command regarding patient safety issues	❍	❍	❍	❍	❍	❍
3. If I make a serious error I worry that I will face disciplinary action from the college	❍	❍	❍	❍	❍	❍
4. Senior management has a clear picture of the risk associated with patient care	❍	❍	❍	❍	❍	❍
5. Senior management provides a climate that promotes patient safety	❍	❍	❍	❍	❍	❍
6. When an incident is reported, it seems like the person is being written up, not the problem	❍	❍	❍	❍	❍	❍
7. I would feel ashamed if I made a serious error and my co-workers heard about it	❍	❍	❍	❍	❍	❍
8. There is no point in talking about a patient safety problem because nothing usually gets done about it	❍	❍	❍	❍	❍	❍
9. Senior management considers patient safety when program changes are discussed	❍	❍	❍	❍	❍	❍
10. My co-workers will think I am incompetent if they know I've made a serious error	❍	❍	❍	❍	❍	❍
11. If I make a serious error my manager will think I am incompetent	❍	❍	❍	❍	❍	❍
12. On my unit, staff who report a *co-worker's* error are labelled as 'not being a team player'	❍	❍	❍	❍	❍	❍
13. I am rewarded for taking quick action to identify a serious error	❍	❍	❍	❍	❍	❍
14. My co-workers would support me if they learned of a serious error I made	❍	❍	❍	❍	❍	❍
15. On this unit it is difficult to speak up if you feel there is a problem related to patient safety	❍	❍	❍	❍	❍	❍
16. My co-workers will lose respect for me if they know I've made a serious error	❍	❍	❍	❍	❍	❍
17. If I report a patient safety incident, someone usually follows up to get more information from me	❍	❍	❍	❍	❍	❍

MSI-2010

Appendix 7 – MSI, continued

	strongly disagree	disagree	neutral	agree	strongly agree	not applicable
18. Making a serious error may cause a staff member to lose his/her job.	❍	❍	❍	❍	❍	❍
19. On this unit it is difficult to question the decisions or actions of those with more authority	❍	❍	❍	❍	❍	❍
20. If I point out a potentially serious patient safety incident, management will look into it	❍	❍	❍	❍	❍	❍
21. Others make you feel like a bit of a failure when you make a error	❍	❍	❍	❍	❍	❍
22. My organization effectively balances the need for patient safety and the need for productivity	❍	❍	❍	❍	❍	❍
23. I work in an environment where patient safety is a high priority	❍	❍	❍	❍	❍	❍
24. Staff are usually given feedback about changes put into place based on incident reports	❍	❍	❍	❍	❍	❍
25. If I make a serious error I worry that I will face disciplinary action from management	❍	❍	❍	❍	❍	❍
26. Making a serious error would limit my career opportunities around here	❍	❍	❍	❍	❍	❍
27. If I made a serious error my manager would be supportive	❍	❍	❍	❍	❍	❍
28. Individuals involved in patient safety incidents have a quick and easy way to report what happened	❍	❍	❍	❍	❍	❍
29. My supervisor/manager says a good word when he/she sees a job done according to established patient safety procedures	❍	❍	❍	❍	❍	❍
30. My supervisor/manager seriously considers staff suggestions for improving patient safety	❍	❍	❍	❍	❍	❍
31. Whenever pressure builds up, my supervisor/manager wants us to work faster, even if it means taking shortcuts	❍	❍	❍	❍	❍	❍
32. My supervisor/manager overlooks patient safety problems that happen over and over	❍	❍	❍	❍	❍	❍
33. On this unit, when a serious error occurs, we think about it carefully	❍	❍	❍	❍	❍	❍
34. On this unit, when people make a serious error, they ask others about how they could have prevented it	❍	❍	❍	❍	❍	❍
35. On this unit, after a serious error has occurred, we think about how it came about and how to prevent the same mistake in the future	❍	❍	❍	❍	❍	❍
36. On this unit, when a serious error occurs, we analyze it thoroughly	❍	❍	❍	❍	❍	❍
37. On this unit, it is difficult to discuss errors	❍	❍	❍	❍	❍	❍
38. On this unit, after a serious error has occurred, we think long and hard about how to correct it	❍	❍	❍	❍	❍	❍

These questions are about your perceptions of overall patient safety	A - Excellent	B - Very Good	C - Acceptable	D - Poor	F - Failing
39. Please give your unit an overall grade on patient safety	❍	❍	❍	❍	❍
40. Please give the organization an overall grade on patient safety	❍	❍	❍	❍	❍

Finally, please help us to analyze these survey data by providing the following information:

Select ONE answer that best describes your role:

- ❍ RN
- ❍ RPN / LPN
- ❍ Clinical educator
- ❍ Clinical care manager
- ❍ Pharmacist
- ❍ Dietician
- ❍ PT, OT, or Speech Therapist
- ❍ Respiratory Therapist
- ❍ Technician (e.g., EKG, Lab, Radiology)
- ❍ Unit Assistant/Clerk/Secretary
- ❍ Health care aide
- ❍ Administration/Management
- ❍ Attending/Staff Physician
- ❍ Resident Physician/Physician in Training
- ❍ EMS staff
- ❍ Other:_____

Time in your current profession:
- ❍ < 1 yr
- ❍ 1-5 yrs
- ❍ 6-10 yrs
- ❍ 11-20 yrs
- ❍ > 20 yrs

Time in this organization:
- ❍ < 1 yr
- ❍ 1-5 yrs
- ❍ 6-10 yrs
- ❍ 11-20 yrs
- ❍ > 20 yrs

Age:
- ❍ ≤ 30
- ❍ 31-40
- ❍ 41-50
- ❍ 51-60
- ❍ > 60

Gender:
- ❍ Female
- ❍ Male

Mother tongue (1st language learned):
- ❍ English
- ❍ Not English

YORK UNIVERSITÉ UNIVERSITY

Thank you for taking the time to complete this survey

Adapted with permission from: CHP PCOR STANFORD; PSCI Patient Safety Center of Inquiry

Appendix 8 – PSCHO

CHP PCOR STANFORD

PATIENT SAFETY CLIMATE IN HEALTHCARE ORGANIZATIONS

PSCI

INSTRUCTIONS

For the following statements, please answer if you "strongly disagree," "disagree," "neither agree nor disagree," "agree," or "strongly agree." If you wish to change an answer, fill in the square for your preferred answer and circle it.

CORRECT MARKS ☒ ■ ☐ ☐ **INCORRECT MARKS** ☑ ☐ ◪ ◯

SECTION I

This set of statements relates to your experiences regarding patient safety in your unit *and* at your facility as of today, unless otherwise noted.

Some statements refer to "my unit." Physicians and other care providers who are not unit-based should respond to these statements based on their experiences in their service, such as medicine or surgery. All others should respond to these statements based on their experiences in the work unit where they spend the majority of their time, such as ICU, 6 South, or Ambulatory Care Blue Team.

Definition: Patient Safety – Activities to avoid, prevent, or correct adverse patient outcomes which may result from the delivery of healthcare.

◆

	Not Applicable	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1. Good communication flow exists up and down the chain of command regarding patient safety issues	☐	☐	☐	☐	☐	☐
2. I am provided with adequate resources (personnel, budget, and equipment) to provide safe patient care	☐	☐	☐	☐	☐	☐
3. Senior management supports a climate that promotes patient safety	☐	☐	☐	☐	☐	☐
4. Senior management has a clear picture of the risks associated with patient care	☐	☐	☐	☐	☐	☐
5. My unit takes the time to identify and assess risks to ensure patient safety	☐	☐	☐	☐	☐	☐
6. Asking for help is a sign of incompetence	☐	☐	☐	☐	☐	☐
7. Senior management has a good idea of the kinds of mistakes that actually occur in this facility	☐	☐	☐	☐	☐	☐
8. My unit does a good job managing risks to ensure patient safety	☐	☐	☐	☐	☐	☐
9. If I make a mistake that has significant consequences and nobody notices, I do not tell anyone about it	☐	☐	☐	☐	☐	☐
10. My unit recognizes individual safety achievement through rewards and incentives	☐	☐	☐	☐	☐	☐
11. Senior management considers patient safety when program changes are discussed	☐	☐	☐	☐	☐	☐
12. Compared to other facilities in the area, this facility cares more about the quality of patient care it provides	☐	☐	☐	☐	☐	☐
13. I have learned how to do my own job better by learning about mistakes made by my coworkers	☐	☐	☐	☐	☐	☐
14. In the last year, I have witnessed a coworker do something that appeared to me to be unsafe for the patient	☐	☐	☐	☐	☐	☐
15. If people find out that I made a mistake, I will be disciplined	☐	☐	☐	☐	☐	☐
16. I have enough time to complete patient care tasks safely	☐	☐	☐	☐	☐	☐
17. Clinicians who make serious mistakes are usually punished	☐	☐	☐	☐	☐	☐
18. In my unit, there is significant peer pressure to discourage unsafe patient care	☐	☐	☐	☐	☐	☐
19. I have never witnessed a coworker do something that appeared to me to be unsafe patient care	☐	☐	☐	☐	☐	☐
20. In the last year, I have done something that was not safe for the patient	☐	☐	☐	☐	☐	☐
21. I am rewarded for taking quick action to identify a serious mistake	☐	☐	☐	☐	☐	☐
22. My unit provides training on teamwork in order to improve patient care performance and safety	☐	☐	☐	☐	☐	☐
23. Overall, the level of patient safety at this facility is improving	☐	☐	☐	☐	☐	☐
24. Patient safety decisions are made by the most qualified people, regardless of rank or hierarchy	☐	☐	☐	☐	☐	☐

Appendix 8 – PSCHO, continued

	Not Applicable	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
25. Management in my unit helps me overcome problems that make it hard for me to provide safe patient care	☐	☐	☐	☐	☐	☐
26. Mistakes have led to positive changes in my unit	☐	☐	☐	☐	☐	☐
27. Staff feel comfortable questioning the actions of those with more authority when patient safety is at risk	☐	☐	☐	☐	☐	☐
28. Bringing patient safety problems to management's attention usually results in the problem being addressed	☐	☐	☐	☐	☐	☐
29. In my unit, management puts safety at a higher level of importance than meeting the schedule and productivity	☐	☐	☐	☐	☐	☐
30. I have received sufficient training to enable me to address patient safety problems	☐	☐	☐	☐	☐	☐
31. My performance is evaluated against defined safety standards	☐	☐	☐	☐	☐	☐
32. In my unit, anyone found to intentionally violate standards or safety rules is corrected	☐	☐	☐	☐	☐	☐
33. Staff freely speak up if they see something that may negatively affect patient care	☐	☐	☐	☐	☐	☐
34. Whenever pressure builds up, management in my unit wants us to work faster, even if it means taking shortcuts that might negatively affect patient safety	☐	☐	☐	☐	☐	☐
35. On my unit, we identify and fix safety problems before an incident actually occurs	☐	☐	☐	☐	☐	☐
36. When I take time to communicate about patient safety problems there is appropriate follow up	☐	☐	☐	☐	☐	☐
37. I am comfortable reporting safety concerns without fear of being punished by management	☐	☐	☐	☐	☐	☐
38. Our process of accident and incident investigation is effective at identifying root causes	☐	☐	☐	☐	☐	☐
39. This facility devotes sufficient resources to follow up on identified safety problems	☐	☐	☐	☐	☐	☐
40. Deliberate violations of standard operating procedures are rare in my unit	☐	☐	☐	☐	☐	☐
41. In my unit, patient safety problems and errors are communicated to the right people so that the problem can be corrected	☐	☐	☐	☐	☐	☐
42. I will be blamed if I make an error	☐	☐	☐	☐	☐	☐
43. People will doubt my abilities if I ask a question	☐	☐	☐	☐	☐	☐
44. My coworkers will lose respect for me if they know I've made a mistake	☐	☐	☐	☐	☐	☐
45. I feel embarrassed when I make a mistake in front of my coworkers	☐	☐	☐	☐	☐	☐

SECTION II

Please complete the following information. Remember, your answers are anonymous.

46. I am: ☐ Senior Management - department head or above ☐ Supervisor, but not senior management ☐ Not a supervisor

47. My position is:

☐ Physician - staff	☐ Pharmacist	☐ Respiratory Therapist	☐ Patient Travel/Escort
☐ Resident/intern/fellow	☐ Physician Assistant	☐ Audiologist	☐ Radiology Technician
☐ RN	☐ Physical Therapist	☐ Psychologist	☐ Occupational Therapist
☐ RNP	☐ Housekeeping Aide	☐ Clinical Lab Technician	☐ Speech Pathologist
☐ LVN	☐ Food Technician	☐ Ward/Clinic Clerk	☐ Other
☐ Nursing Assistant			

48. Clinical work area:

☐ Amb Care	☐ Urgent Care	☐ OR	☐ PACU	☐ Ward	☐ Pharmacy
☐ ER	☐ ICU	☐ Labor & Delivery	☐ Lab	☐ Home Care	☐ Non-clinical

49. Age: ☐ 18 - 25 ☐ 26 - 30 ☐ 31 - 40 ☐ 41 - 50 ☐ 51 - 60 ☐ > 60

50. Gender: ☐ Female ☐ Male

51. How long have you been at this facility?

☐ 0 - 6 months ☐ 6 months - 1 year ☐ 1 - 3 years ☐ 3 - 5 years ☐ 5 - 10 years ☐ > 10 years

Thank you for your participation.

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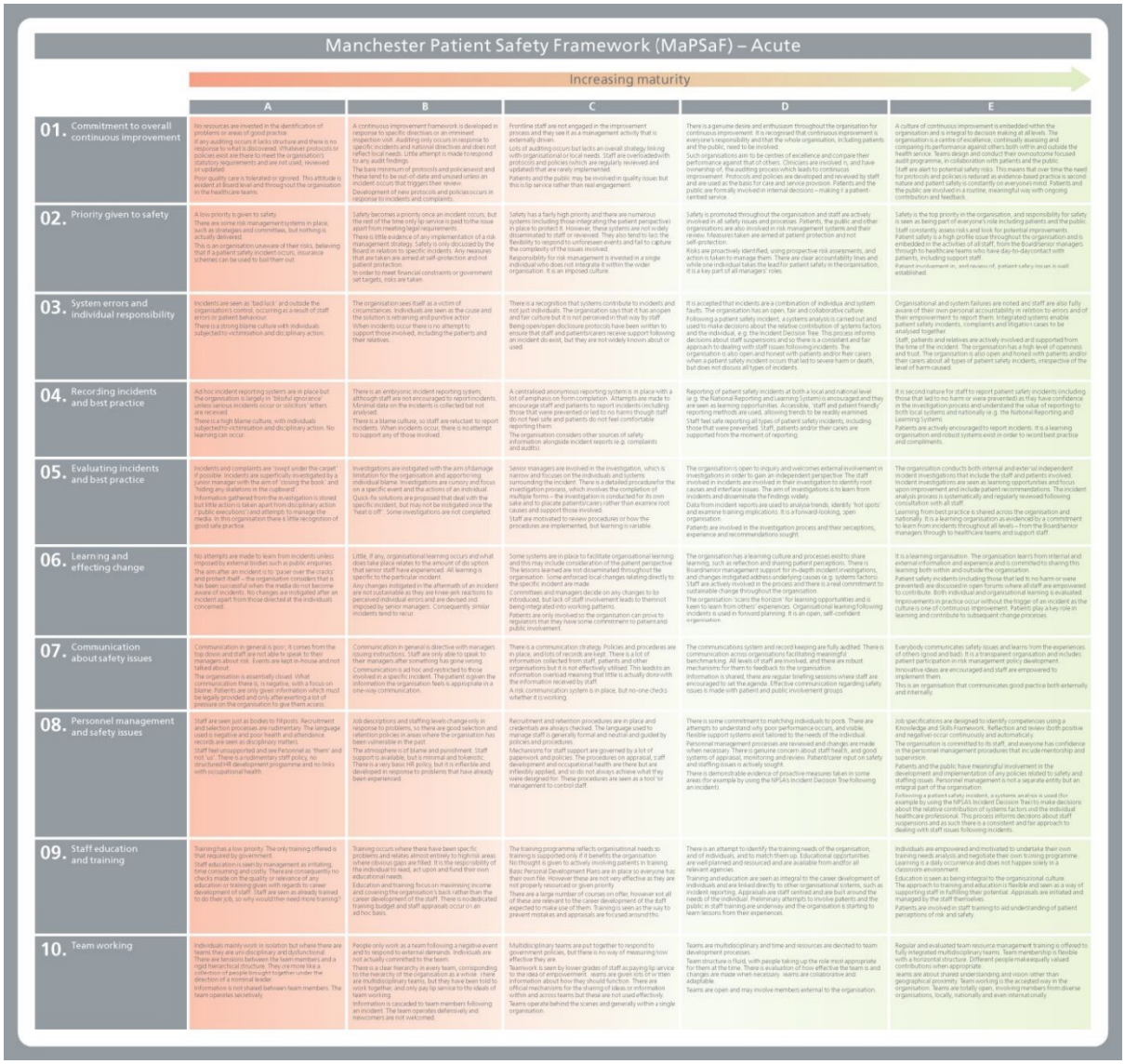
Appendix 9 – MaPSaF



Manchester Patient Safety Framework (MaPSaF) – Acute

Increasing maturity

	A	B	C	D	E
01. Commitment to overall continuous improvement	No resources are invested in the identification of problems or areas of good practice. If any auditing occurs it lacks structure and there is no response to what is discovered. Whatever protocols or policies exist are there to meet the organisation's statutory requirements and are not used, reviewed or updated. Poor quality care is tolerated or ignored. This attitude is evident at Board level and throughout the organisation in the healthcare teams.	A continuous improvement framework is developed in response to specific directives or an imminent inspection visit. Auditing only occurs in response to specific incidents and national directives and does not reflect local needs. Little attempt is made to respond to any audit findings. The bare minimum of protocols and policies exist and these tend to be out-of-date and unused unless an incident occurs that triggers their review. Development of new protocols and policies occurs in response to incidents and complaints.	Frontline staff are not engaged in the improvement process and they see it as a management activity that is externally driven. Lots of auditing occurs but lacks an overall strategy linking with organisational or local needs. Staff are overloaded with protocols and policies (which are regularly reviewed and updated) that are rarely implemented. Patients and the public may be involved in quality issues but this is lip service rather than real engagement.	There is a genuine desire and enthusiasm throughout the organisation for continuous improvement. It is recognised that continuous improvement is everyone's responsibility and that the whole organisation, including patients and the public, need to be involved. Such organisations aim to be centres of excellence and compare their performance against that of others. Clinicians are involved in, and have ownership of, the auditing process which leads to continuous improvement. Protocols and policies are developed and reviewed by staff and are used as the basis for care and service provision. Patients and the public are formally involved in internal decisions – making it a patient-centred service.	A culture of continuous improvement is embedded within the organisation and is integral to decision making at all levels. The organisation is a centre of excellence, continually assessing and comparing its performance against others both within and outside the health service. Teams design and conduct their own/outcome focused audit programme, in collaboration with patients and the public. Staff are alert to potential safety risks. This means that over time the need for protocols and policies is reduced as evidence-based practice is second nature and patient safety is constantly on everyones mind. Patients and the public are involved in a routine, meaningful way with ongoing contribution and feedback.
02. Priority given to safety	A low priority is given to safety. There are some risk management systems in place, such as strategies and committees, but nothing is actually delivered. This is an organisation unaware of their risks, believing that if a patient safety incident occurs, insurance schemes can be used to bail them out.	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. There is little evidence of any implementation of a risk management strategy. Safety is only discussed by the Board in relation to specific incidents. Any measures that are taken are aimed at self-protection and not patient protection. In order to meet financial constraints or government set targets, risks are taken.	Safety has a fairly high priority and there are numerous systems (including those integrating the patient perspective) in place to protect it. However, these systems are not widely disseminated to staff or reviewed. They also tend to lack the flexibility to respond to unforeseen events and fail to capture the complexity of the issues involved. Responsibility for risk management is invested in a single individual who does not integrate it within the wider organisation. It is an imposed culture.	Safety is promoted throughout the organisation and staff are actively involved in all safety issues and processes. Patients, the public and other organisations are also involved in risk management systems and their review. Measures taken are aimed at patient protection and not self-protection. Risks are proactively identified, using prospective risk assessments, and action is taken to manage them. There are clear accountability lines and while one individual takes the lead for patient safety in the organisation, it is a key part of all managers' roles.	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. Staff constantly assess risks and look for potential improvements. Patient safety is a high profile issue throughout the organisation and is embedded in the activities of all staff, from the Board/senior managers through to healthcare teams who have day-to-day contact with patients, including support staff. Patient involvement in, and review of, patient safety issues is well established.
03. System errors and individual responsibility	Incidents are seen as 'bad luck' and outside the organisation's control, occurring as a result of staff errors or patient behaviour. There is a strong blame culture with individuals subjected to victimisation and disciplinary action.	The organisation sees itself as a victim of circumstances. Individuals are seen as the cause and the solution is retraining and punitive action. When incidents occur there is no attempt to support those involved, including the patients and their relatives.	There is a recognition that systems contribute to incidents and not just individuals. The organisation says that it has an open and fair culture but it is not perceived in that way by staff. Being open/open disclosure protocols have been written to ensure that staff and patients/carers receive support following an incident do exist, but they are not widely known about or used.	It is accepted that incidents are a combination of individua and system faults. The organisation has an open, fair and collaborative culture. Following a patient safety incident, a systems analysis is carried out and used to make decisions about the relative contribution of systems factors and the individual, e.g. the Incident Decision Tree. This process informs decisions about staff suspensions and so there is a consistent and fair approach to dealing with staff issues following incidents. The organisation is also open and honest with patients and/or their carers when a patient safety incident occurs that led to severe harm or death, but does not discuss all types of incidents.	Organisational and system failures are noted and staff are also fully aware of their own personal accountability in relation to errors and of their empowerment to report them. Integrated systems enable patient safety incidents, complaints and litigation cases to be analysed together. Staff, patients and relatives are actively involved and supported from the time of the incident. The organisation has a high level of openness and trust. The organisation is also open and honest with patients and/or their carers about all types of patient safety incidents, irrespective of the level of harm caused.
04. Recording incidents and best practice	Ad hoc incident reporting systems are in place but the organisation is largely in 'blissful ignorance' unless serious incidents occur or solicitors' letters are received. There is a high blame culture, with individuals subjected to victimisation and disciplinary action. No learning can occur.	There is an embryonic incident reporting system, although staff are not encouraged to report incidents. Minimal data on the incidents is collected but not analysed. There is a blame culture, so staff are reluctant to report incidents. When incidents occur, there is no attempt to support any of those involved.	A centralised anonymous reporting system is in place with a lot of emphasis on form completion. Attempts are made to encourage staff and patients to report incidents (including those that were prevented or led to no harm) though staff do not feel safe and patients do not feel comfortable reporting them. The organisation considers other sources of safety information alongside incident reports (e.g. complaints and audits).	Reporting of patient safety incidents at both a local and national level (e.g. the National Reporting and Learning System) is encouraged and they are seen as learning opportunities. Accessible, 'staff and patient friendly' reporting methods are used, allowing trends to be readily examined. Staff feel safe reporting all types of patient safety incidents, including those that were prevented. Staff, patients and/or their carers are supported from the moment of reporting.	It is second nature for staff to report patient safety incidents including those that led to no harm or were prevented) as they have confidence in the investigation process and understand the value of reporting to both local systems and nationally (e.g. the National Reporting and Learning System). Patients are actively encouraged to report incidents. It is a learning organisation and robust systems exist in order to record best practice and compliments.
05. Evaluating incidents and best practice	Incidents and complaints are 'swept under the carpet' if possible. Incidents are superficially investigated by a junior manager with the aim of 'closing the book' and 'hiding any skeletons in the cupboard'. Information gathered from the investigation is stored but little action is taken apart from disciplinary action ('public executions') and attempts to manage the media. In this organisation there is little recognition of good safe practice.	Investigations are instigated with the aim of damage limitation for the organisation and apportioning individual blame. Investigations are cursory and focus on a specific event and the actions of an individual. Quick-fix solutions are proposed that deal with the specific incident, but may not be instigated once the heat is off'. Some investigations are not completed.	Senior managers are involved in the investigation, which is narrow and focuses on the individuals and systems surrounding the incident. There is a detailed procedure for the investigation process, which involves the completion of multiple forms – the investigation is conducted for its own sake and to placate patients/carers rather than examine root causes and support those involved. Staff are motivated to review procedures or how the procedures are implemented, but learning is variable.	The organisation is open to inquiry and welcomes external involvement in investigations in order to gain an independent perspective. The staff involved in incidents are involved in their investigation to identify root causes and interface issues. The aim of investigations is to learn from incidents and disseminate the findings widely. Data from incident reports are used to analyse trends, identify 'hot spots' and examine training implications. It is a forward-looking, open organisation. Patients are involved in the investigation process and their perceptions, experience and recommendations sought.	The organisation conducts both internal and external independent incident investigations that include the staff and patients involved. Incident investigations are seen as learning opportunities and focus upon improvement and include patient recommendations. The incident analysis process is systematically and regularly reviewed following consultation with all staff. Learning from best practice is shared across the organisation and nationally. It is a learning organisation as evidenced by a commitment to learn from incidents throughout all levels – from the Board/senior managers through to healthcare teams and support staff.
06. Learning and effecting change	No attempts are made to learn from incidents unless imposed by external bodies such as public enquiries. The aim after an incident is to 'paper over the cracks' and protect itself – the organisation considers that is has been successful when the media do not become aware of incidents. No changes are instigated after an incident apart from those directed at the individuals concerned.	Little, if any, organisational learning occurs and what does take place relates to the amount of dis uption that senior staff have experienced. All learning is specific to the particular incident. Any changes instigated in the aftermath of an incident are not sustainable as they are knee-jerk reactions to perceived individual errors and are devised and imposed by senior managers. Consequently similar incidents tend to recur.	Some systems are in place to facilitate organisational learning and this may include consideration of the patient perspective. The lessons learned are not disseminated throughout the organisation. Some enforced local changes relating directly to the specific incident are made. Committees and managers decide on any changes to be introduced, but lack of staff involvement leads to them not being integrated into working patterns. Patients are only involved so the organisation can prove to regulators that they have some commitment to patient and public involvement.	The organisation has a learning culture and processes exist to share learning, such as reflection and sharing patient perceptions. There is Board/senior management support for in-depth incident investigations, and changes instigated address underlying causes (e.g. systems factors). Staff are actively involved in the process and there is a real commitment to sustainable change throughout the organisation. The organisation 'scans the horizon' for learning opportunities and is keen to learn from others' experiences. Organisational learning following incidents is used in forward planning. It is an open, self-confident organisation.	It is a learning organisation. The organisation learns from internal and external information and experience and is committed to sharing this learning both within and outside the organisation. Patient safety incidents (including those that led to no harm or were prevented) are discussed in open forums where all staff are empowered to contribute. Both individual and organisational learning is evaluated. Improvements in practice occur without the trigger of an incident as the culture is one of continuous improvement. Patients play a key role in learning and contribute to subsequent change processes.
07. Communication about safety issues	Communication in general is poor; it comes from the top down and staff are not able to speak to their managers about risk. Events are kept in-house and not talked about. The organisation is essentially closed. What communication there is, is negative, with a focus on blame. Patients are only given information which must be legally provided and only after exerting a lot of pressure on the organisation to give them access.	Communication in general is directive with managers issuing instructions. Staff are only able to speak to their managers after something has gone wrong. Communication is ad hoc and restricted to those involved in a specific incident. The patient is given the information the organisation feels is appropriate in a one-way communication.	There is a communication strategy. Policies and procedures are in place, and lots of records are kept. There is a lot of information collected from staff, patients and other organisations but it is not effectively utilised. This leads to an information overload meaning that little is actually done with the information received by staff. A risk communication system is in place, but no-one checks whether it is working.	The communications system and record keeping are fully audited. There is communication across organisations facilitating meaningful benchmarking. All levels of staff are involved, and there are robust mechanisms for them to feedback to the organisation. Information is shared, there are regular briefing sessions where staff are encouraged to set the agenda. Effective communication regarding safety issues is made with patient and public involvement groups.	Everybody communicates safety issues and learns from the experiences of others (good and bad). It is a transparent organisation and includes patient participation in risk management policy development. Innovative ideas are encouraged and staff are empowered to implement them. This is an organisation that communicates good practice both externally and internally.
08. Personnel management and safety issues	Staff are seen just as bodies to fill posts. Recruitment and selection processes are rudimentary. The language used is negative and poor health and attendance records are seen as disciplinary matters. Staff feel unsupported and see Personnel as 'them' and not 'us'. There is a rudimentary staff policy, no structured HR development programme and no links with occupational health.	Job descriptions and staffing levels change only in response to problems, so there are good selection and retention policies in areas where the organisation has been vulnerable in the past. The atmosphere is of blame and punishment. Staff support is available, but is minimal and tokenistic. There is a very basic HR policy, but it is inflexible and developed in response to problems that have already been experienced.	Recruitment and retention procedures are in place and credentials are always checked. The language used to manage staff is generally formal and neutral and guided by policies and procedures. Mechanisms for staff support are governed by a lot of paperwork and policies. The procedures on appraisal, staff development and occupational health are there but are inflexibly applied, and so do not always achieve what they were designed for. These procedures are seen as a tool 'or management to control staff.	There is some commitment to matching individuals to posts. There are attempts to understand why poor performance occurs, and visible, flexible support systems exist tailored to the needs of the individual. Personnel management processes are reviewed and changes are made when necessary. There is genuine concern about staff health, and good systems of appraisal, monitoring and review. Patient/carer input on safety and staffing issues is actively sought. There is demonstrable evidence of proactive measures taken in some areas (for example by using the NPSA's Incident Decision Tree following an incident).	Job specifications are designed to identify competencies using a Knowledge and Skills Framework. Reflection and review (both positive and negative) occur continuously and automatically. The organisation is committed to its staff, and everyone has confidence in the personnel management procedures that include mentorship and supervision. Patients and the public have meaningful involvement in the development and implementation of any policies related to safety and staffing issues. Personnel management is not a separate entity but an integral part of the organisation. Following a patient safety incident, a systems analysis is used (for example by using the NPSA's Incident Decision Tree) to make decisions about the relative contribution of systems factors and the individual healthcare professional. This process informs decisions about staff suspensions and as such there is a consistent and fair approach to dealing with staff issues following incidents.
09. Staff education and training	Training has a low priority. The only training offered is that required by government. Staff education is seen by management as irritating, time consuming and costly. There are consequently no checks made on the quality or relevance of any education or training given with regards to career development of staff. Staff are seen as already trained to do their job, so why would their need more training?	Training occurs where there have been specific problems and relates almost entirely to high-risk areas where obvious gaps are filled. It is the responsibility of the individual to read, act upon and fund their own educational needs. Education and training focus on maximising income and covering the organisation's back rather than the career development of the staff. There is no dedicated training budget and staff appraisals occur on an ad hoc basis.	The training programme reflects organisational needs so training is supported only if it benefits the organisation. No thought is given to actively involving patients in training. Basic Personal Development Plans are in place so everyone has their own file. However these are not very effective as they are not properly resourced or given priority. There are a large number of courses on offer, however not all of these are relevant to the career development of the staff expected to make use of them. Training is seen as the way to prevent mistakes and appraisals are focused around this.	There is an attempt to identify the training needs of the organisation, and of individuals, and to match them up. Educational opportunities are well planned and resourced and are available from and/or all relevant agencies. Training and education are seen as integral to the career development of individuals and are linked directly to other organisational systems, such as incident reporting. Appraisals are staff centred and are built around the needs of the individual. Preliminary attempts to involve patients and the public in staff training are underway and the organisation is starting to learn lessons from their experiences.	Individuals are empowered and motivated to undertake their own training needs analysis and negotiate their own training programme. Learning is a daily occurrence and does not happen solely in a classroom environment. Education is seen as being integral to the organisational culture. The approach to training and education is flexible and seen as a way of supporting staff in fulfilling their potential. Appraisals are initiated and managed by the staff themselves. Patients are involved in staff training to aid understanding of patient perceptions of risk and safety.
10. Team working	Individuals mainly work in isolation but where there are teams they are uni-disciplinary and dysfunctional. There are tensions between the team members and a rigid hierarchical structure. They are more like a collection of people brought together under the direction of a nominal leader. Information is not shared between team members. The team operates secretively.	People only work as a team following a negative event and to respond to external demands. Individuals are not actually committed to the team. There is a clear hierarchy in every team, corresponding to the hierarchy of the organisation as a whole. There are multidisciplinary teams, but they have been told to work together, and only pay lip service to the ideals of team working. Information is cascaded to team members following an incident. The team operates defensively and newcomers are not welcomed.	Multidisciplinary teams are put together to respond to government policies, but there is no way of measuring how effective they are. Teamwork is seen by lower grades of staff as paying lip service to the idea of empowerment. Teams are given lots of information about how they should function. There are official mechanisms for the sharing of ideas or information within and across teams but these are not used effectively. Teams operate behind the scenes and generally within a single organisation.	Teams are multidisciplinary and time and resources are devoted to team development processes. Team structure is fluid, with people taking up the role most appropriate for them at the time. There is evaluation of how effective the team is and changes are made when necessary. teams are collaborative and adaptable. Teams are open and may involve members external to the organisation.	Regular and evaluated team resource management training is offered to fully integrated multidisciplinary teams. Team membership is flexible with a horizontal structure. Different people make equally valued contributions when appropriate. teams are about shared understanding and vision rather than geographical proximity. Team working is the accepted way in the organisation. Teams are totally open, involving members from diverse organisations, locally, nationally and even internationally.

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