

Year	Author	Focus and purpose of tool	Number of tools	Tools <small>Similar tools have the same letter</small>	Approach of tool <small>Typological approach</small>	Number of Dimensions	Dimension 1	Dimension 2	Dimension 3	Dimension 4	Dimension 5	Dimension 6	Dimension 7	Dimension 8	Dimension 9	Dimension 10	Dimension 11	Dimension 12	Dimension 13	Dimension 14				
2003	Scott et al.	Organizational culture; review of available quantitative instruments measuring organizational culture in health care  Healthcare setting, majority of instruments in hospital setting	9	1. Competing Values Framework <sup>a</sup>	Quantitative*	4	Staff climate	Leadership style	Bonding systems	Prioritization of goals														
				2. Quality Improvement Implementation survey <sup>b</sup>	Quantitative*	5	Character of organization	Managers' style	Cohesion	Prioritization of goals	Rewards													
				3. Organizational culture inventory <sup>c</sup>	Quantitative*	12	Humanistic	Helpful	Affiliative	Approval	Conventional	Dependent	Avoidance	Oppositional	Power	Competitive	Competence/perfectionist	Achievement	Selfactualization					
				4. Harrison's organizational ideology questionnaire <sup>d</sup>	Quantitative	4	Power	Roles	Tasks	Individuals														
				5. Hospital culture questionnaire <sup>e</sup>	Quantitative	8	Supervision	Employer attitudes	Role significance	Hospital image	Competitiveness	Staff benefits,	Cohesiveness	Workload										
				6. Nursing Unit Cultural Assessment Tool <sup>f</sup>	Quantitative	x																		
				7. Practice Culture Questionnaire <sup>g</sup>	Quantitative	x																		
				8. MacKenzie's Culture Questionnaire <sup>h</sup>	Quantitative	10	Attitudes to change	Style of conflict	Resolution	Management style	Confidence in leadership	Openness and trust	Teamwork and cooperation	Human resource orientation	Consumer orientation	Organizational direction								
				9. Survey of Organizational Culture <sup>i</sup>	Quantitative	13	Orientation to customers	Orientation to employees	Congruence among stakeholders	Impact of mission,	Managerial depth/maturity	Decisionmaking/autonomy	Communication/openess	Human scale	Incentive/motivation	Cooperation versus competition	Organizational congruence	Performance under pressure	Theory S/theory T.					
2004	Gershon et al.	Organizational culture; measuring organizational culture and climate in healthcare  Healthcare setting, all instruments generally hospital-based	12	1. Modified organizational climate descriptive questionnaire <sup>y</sup>	Quantitative	5 (major dimensions based on 10 questionnaires)	Leadership	Communication	Group behaviors and relationships	Healthcare worker outcomes	Quality of work life: structural attributes													
				2. Organizational climate questionnaire	Quantitative																			
				3. Organizational climate measure	Quantitative																			
				4. Work environment tool	Quantitative																			
				5. Profile of organizational characteristics	Quantitative																			
				6. Organizational Culture Index <sup>1</sup>	Quantitative*																			
				7. Organizational Questionnaire	Quantitative																			
				8. Work Climate Survey	Quantitative																			
				9. Nursing Work Index <sup>2</sup>	Quantitative																			
				10. Organizational culture inventory <sup>3</sup>	Quantitative*																			
				11. ICU Nurse Physician Questionnaire	Quantitative																			
				12. Quality improvement implementation survey <sup>4</sup>	Quantitative*																			
2005	Colla et al.	Patient safety climate; review of surveys that measure patient safety climate  Healthcare setting; 5 for general evaluation, two for within hospital units, and two for use in specific healthcare organizations	9	1. Strategies for Leadership: an organizational approach to patient safety	Quantitative	5	Communication	Staffing	Leadership	Policies and procedures	Reporting													
				2. Patient safety cultures in healthcare organizations	Quantitative																			
				3. Veterans administration patient safety culture questionnaire	Quantitative																			
				4. Hospital survey on patient safety <sup>1</sup>	Quantitative																			
				5. Culture of safety survey <sup>2m</sup>	Quantitative																			
				6. Safety attitudes questionnaire <sup>n</sup>	Quantitative																			
				7. Safety climate survey (10 item version called safety climate scales) <sup>o</sup>	Quantitative																			
				8. Medication safety self-assessment	Quantitative																			
				9. Hospital transfusion service safety culture survey	Quantitative																			
2006	Singla et al.	Safety culture; a review and synthesis of the measurement tools  Hospital setting	13	1. Safety Attitudes Questionnaire,* ICU version <sup>n</sup>	Quantitative	23	Management and institutional commitment to safety	Communication openness	Beliefs about causes of errors and adverse events	Nonpunitive response to error	What should be reported and to whom	Teamwork	Feedback and communication	Institutional responses	Reporting infrastructure	Work pressure	Overall perception of safety	Adequacy of training and supervision						
				2. Veteran Affairs Palo Alto/ Stanford Patient Safety <sup>o</sup> Center for Inquiry	Quantitative																			
				3. Veterans Health Administration Patient Safety Questionnaire <sup>p</sup>	Quantitative																			
				4. Hospital Safety Culture Questionnaire (modified from 5. Operating Room Management Attitudes Questionnaire (ORMAQ)) <sup>q</sup>	Quantitative																			
				6. Agency for Healthcare Research and Quality Hospital Survey on Patient Safety <sup>1</sup>	Quantitative																			
				7. Safety Climate Survey <sup>o</sup>	Quantitative																			
				8. Allina Hospitals and Clinics	Quantitative																			
				9. Culture of Safety Survey <sup>m</sup>	Quantitative																			
				10. Teamwork and Patient Safety Attitudes Questionnaire <sup>n</sup>	Quantitative																			
				11. Modified ORMAQ <sup>o</sup>	Quantitative																			
				12. Patient Safety Climate in Anesthesia	Quantitative																			
				12. Trainee Supplemental Survey (Children's Hospital Boston)	Quantitative																			
				13. Safety Climate Scale <sup>o</sup>	Quantitative																			
2006	Flin et al.	Safety climate and culture; review of quantitative studies of safety climate in health care and examine the psychometric properties of the questionnaires	12	1. Safety climate scale 35 items (part of a longer questionnaire) (Dejoy et al) <sup>o</sup>	Quantitative	8	Safety performance feedback	Management commitment to safety	Provision of Ppe	UP-related job hindrances	Knowledge and information about UP	Risk of infection	Self-protective actions	Work organisation										





2010	Palmieri et al.	Safety culture; theoretical review and research assessment of safety culture	3	1. Hospital Survey on Patient Safety Culture (HSOPSC) <sup>1</sup>	Quantitative	14	Hospital management support for safety	Organizational learning	Teamwork within units	Supervisor/manager expectations and actions promote safety	Compliance with procedures	Staffing	Error feedback and communication	Overall perceptions of safety	Openness of communication	Nonpunitive response to error	Positive-reporting norms	Frequency of event reporting	Teamwork across units	Hospital handoffs and transitions	
				2. Safety Attitude Questionnaire (SAQ) <sup>2</sup>		Quantitative	6	Teamwork climate (Perceived quality of collaboration between personnel)	Job satisfaction (Positivity about work experience)	Perceptions of management (Approval of management actions)	Safety climate Perception of strong and proactive organizational commitment to quality	Working conditions (Perceived quality of the work environment and logistical support)	Stress recognition (Acknowledgement of how performance is influenced by stressors)								
				3. Safety Organizing Scale (SOS) <sup>3</sup>			Quantitative	5	Preoccupation with failure	Reluctance to simplify	Sensitivity to operations	Commitment to resilience	Deference to expertise								
2011	Halligan and Zecevic	Safety culture; a review of measures of safety culture in healthcare	20	1. Hospital Survey on Patient Safety Culture (AHRQ) <sup>1</sup>	Quantitative	6		Leadership commitment to safety	Open communication founded on trust	Organisational learning	A non-punitive approach to adverse event reporting and analysis	Teamwork	Shared belief in the importance of safety								
				2. Safety Attitudes Questionnaire <sup>2</sup>																	
				3. Patient Safety Culture in Healthcare Organizations Survey (PSCHO) <sup>3</sup>																	
				4. Modified Stanford Patient Safety Culture Survey tool (MSJ) <sup>4</sup>																	
				5. MaPSaF = Manchester Patient Safety Framework <sup>5</sup>																	
				6. SCS = Safety Climate Scale <sup>6</sup>																	
				7. Culture Change Assessment Tool																	
				8. Survey of factors related to inpatient violence																	
				9. Close Call Pilot Culture Assessment																	
				10. PSCIT																	
				11. Questionnaire of Patient Safety at your hospital																	
				12. Safety Culture Priority Index																	
				13. Culture check-up tool																	
				14. Safety Organizing Scale <sup>14</sup>																	
				15. Sentinel Events at the academic hospitals: evaluation of housestaff and medical student attitudes toward adverse medical events survey																	
				16. Unnamed survey (Weingart et al.)																	
				17. Nursing Climate Scale																	
				18. Focus Group																	
				19. Interview <sup>19</sup>																	
				20. Observation <sup>20</sup>																	
2012	Freeth et al.	Safety culture; a methodological study to compare survey-based and observation-based evaluations of organisational and safety cultures and then compare both approaches with markers of the quality of care	12	1. Harrison's Organizational Ideology Questionnaire <sup>d</sup>	Quantitative	9	Teamwork climate	Safety climate	Job satisfaction,	Stress recognition	Perceptions of management	Working conditions	Absence of barriers to safe working practices	Minimal conflict and good communication among staff	Safety-related feedback						
				2. The Competing Values Framework (CVF) <sup>a</sup>																	
				3. The Organizational Culture Inventory <sup>c</sup>																	
				4. The Quality Improvement Implementation Survey b																	
				5. SAQ (multiple versions, including the Teamwork and Safety Climate Survey and the Institute for Health Care Improvement Safety Climate Survey) <sup>5</sup>																	
				6. Hospital Survey on Patient Safety Culture for the United States Agency for Healthcare Research and Quality (AHRQ) <sup>1</sup>																	
				7. The Patient Safety Climate in Healthcare Organizations questionnaire (PSCHOQ) <sup>7</sup>																	
				8. Hospital Safety Climate Questionnaire																	
				9. MaPSaF <sup>5</sup>																	
				10. Ethnography <sup>10</sup>																	
				11. Observation <sup>11</sup>																	
				12. Interviews v																	
2014	Pumar-Mendez et al.	Safety culture - thematic literature review to identify methodological aspects in the assessment of hospital based safety culture	9	1. Survey of Safety Culture in Hospitals (SSCH)	Quantitative	8	Power distance	Communication	Teamwork	Recognition of own performance under high stress	Stress management for team members	Morale and motivation	Satisfaction with management	Recognition of human error	Awareness of own competence						
				2. Patient Safety Cultures in Healthcare Organisations (PSCHO) <sup>2</sup>		Quantitative	5	Organization	Department	Production	Reporting/seeking help	Shame/self-awareness									

Hospital setting	3. Safety Climate Scale (SCS) <sup>o</sup>	Quantitative	3	Commitment to safety	Knowledge of error reporting	Understanding of system's role in the occurrence of errors												
	4. Strategies for Leadership (SL)	Quantitative	6	Leadership	Strategic planning	Information and analysis	Human resources	Process management	Patent and family involvement									
	5. Weigart et al.'s (2004) self-developed survey tool	Quantitative	5	Leadership commitment	Professional salience	Non-punitive environment	Error reporting	Communication										
	6. Liu et al.'s (2009) self-developed survey tool	Quantitative	7	Leadership and management towards patient safety	Feedback and communication about errors	Staffing	Non-punitive error reporting	Learning from errors	Staff cooperation	Perceptions of overall inpatient safety								
	7. Safety Attitudes Questionnaire (SAQ) <sup>n</sup>	Quantitative	6	Stress recognition	Working conditions	Safety climate	Perceptions of management	Job satisfaction	Teamwork									
	8. Safety Organizing Scale (SOS) <sup>w</sup>	Quantitative	1	Collective mindfulness														
	9. Hospital Survey on Patient Safety Culture (HSOPSC) <sup>1</sup>	Quantitative	12	Overall perceptions of safety	Frequency of event reporting	Supervisor/manager expectations and actions promoting patient safety	Organizational learning/continuous improvement	Teamwork within units	Communication openness	Feedback and communication about error	Non-punitive response to error	Staffing	Hospital management support for patient safety	Teamwork across hospital units	Hospital handoffs and transitions			
	2016 Manser et al.	Safety climate: quantitative measures in healthcare sector of safety climate in german speaking countries	11	1. Patient Safety Climate Inventory (PaSKI) [11]	Quantitative	12	Teamwork	Supervisor expectations/actions promoting patient safety	Organisational learning, continuous improvement	Hospital management support for patient safety	Feedback and communication about error	Staffing	Communication openness	Teamwork across hospital units	Hospital handoffs and transitions	Nonpunitive response to errors	Unit management support for patient safety	Unit handoffs and transitions
		Healthcare setting: hospitals, nursing homes, primary care, dental care and community pharmacy		2. Hospital Survey on Patient Safety culture for hospital management (HSOPS M)	Quantitative	10	Teamwork	Supervisor expectations/actions	Organisational learning	Hospital management support for patient safety	Feedback and communication about error	Staffing	Communication openness	Teamwork across hospital units	Hospital handoffs and transitions	Nonpunitive response to errors		
			3. Safety attitudes questionnaire (SAQ- Swiss version) <sup>n</sup>	Quantitative	6	Teamwork	Safety climate	Job satisfaction	Stress recognition	Perceptions of management	Working conditions							
			4. Safety climate survey (SCS) <sup>o</sup>	Quantitative	1	Safety Climate												
			5. Safety Organizing Scale (SOS-Swissversion) <sup>w</sup>	Quantitative	1	Safety organizing scale												
			6. Vienne Safety Culture questionnaire (WSF)	Quantitative	7	Active learning from mistakes	Management commitment to patient safety	Stress and workload	Communication and cooperation regarding patient safety	Attitudes of shared care and concern for hazards	Error fatalism	Processes and equipment						
			7. Nursing Home Survey on Patient Safety Culture (NHSPSC-CH)	Quantitative	11	Teamwork	Supervisor expectations and promoting patient safety	Organizational learning	Management support for resident safety	Feedback and communication about incidents	Staffing	Communication openness	Training and skills	Handoffs	Nonpunitive response to errors	Compliance with procedures		
			8. Frankfurt patient safety climate questionnaire for General Practice (FrASK)	Quantitative	9	Teamwork climate	Safety of practice structure	Job satisfaction	Staff perception of management	Receptiveness to healthcare assistants and patients	Safety of clinical processes	Quality and safety of medical care	Perception of causes of error	Error management				
			9. Survey of Organizational attributes for primary care (SOAPC)	Quantitative	4	Communication	Decision making	Stress/chaos	History of change									
			10. Survey of Organizational attributes for dental care (SOADC)	Quantitative	4	Communication	Decision making	Stress/chaos	History of change									
			11. Pharmacy safety climate questionnaire (PSCQ-4)	Quantitative	4	Organizational learning	Blame culture	Working conditions	Safety focus									
2018 Alsalem et al.	Safety climate: a systematic review of survey measurement tools determining safety climate in acute hospital settings	5	1. Hospital Survey on Patient Safety Culture (HSOPSC) <sup>1</sup>	Quantitative	12	Top management support & institutional commitment to safety	Teamwork	Safety systems: "Policies & Procedures, Safety Planning, Hand offs & Transitions, Staffing, Equipment"	Safety perceptions & Attitudes of staff, Risk perceptions	Reporting incidents & "non-punitive" response to error	Communication openness	Organizational learning and continuous improvement	Beliefs about the causes of errors & adverse events	Training & continuous education	Staff satisfaction	Feedback & Communication about adverse events	Work Pressure	
	2. Safety Attitudes Questionnaire (SAQ) <sup>n</sup>	Quantitative																
	3. Patient Safety Cultures in Healthcare Organisations (PSCHO) <sup>3</sup>	Quantitative																
	4. SOS <sup>w</sup>	Quantitative																
	5. Can-PSC	Quantitative																
2018 Lawati et al.	Safety climate and culture; systematic review on the safety culture and patient safety measures used globally to inform the development of safety culture among health care workers in primary care with a particular focus on the Middle East.	3	1. The Hospital Survey on Patient Safety Culture (HSOPSC) <sup>1</sup>	Quantitative	12	Management support	Organizational learning	Teamwork within units	Supervisors expectations and actions	Staffing	Error feedback and communication	Communication openness	Nonpunitive response to error	Number of error reporting	Frequency of error reporting	Teamwork across units	Handoffs and transitions	
	Primary care setting		2. Safety Attitudes Questionnaire (SAQ) <sup>n</sup>	Quantitative	9	Job satisfaction	Teamwork climate	Perception of work environment	Communication	Patient safety	Ongoing education	management of the healthcare center	recognition of stress	Error prevention by using preventive measures				
			3. MaPSaf = Manchester Patient Safety Framework <sup>4</sup>	Qualitative approach*	10	Continuous improvement	Priority given to staff	System errors and individual responsibility	Recording incidents	Evaluation incidents	Learning and effecting change	Communication personnel management	Staff education	Teamwork				