

Author/Source	Measure of the Effect	Meta or Narrative	Explanation for the Effect (Intervention Features)	Perception:
Leadership Support for Safety				
<i>Perceptions of Management (SAQ)</i>				
Abtoss, 2011	% positive response, p value	Meta	not attribute changes to any specific features of the intervention	
Basson	% positive response, p value		Could not attribute changes to any specific features of the intervention	
Berry	% positive response, p value		work climate. Separately, they also observed that serious safety events have often occurred in units	
Yuce	% positive response, p value		collaborative meetings with achievement recognition, and QI coaching and mentoring. These tools wer	
Blegen	change in mean average of likert scale, p value		Could not attribute changes to any specific features of the intervention	
Dickens, 2020	change in mean average of likert scale, p value		ervention did not have an effect, with the exception of a small change to organisational culture (unexpl	
Frankel, 2008	% positive response, p value		pecifically dealt with discussing local patient safety concerns. In particular, improvement in the safety cl	
Hababbeh, 2020	change in mean average of likert scale, p value		Did not attribute the effects to specific features of the intervention	
Kristensen, 2016	Both mean scale (0-100) and % positive response		Did not attribute the effects to specific features of the intervention	
Milton	% positive response, p value		Could not attribute changes to any specific features of the intervention.	
Paine, 2010	% positive response, p value		First, CUSP provides enough structure to establish a system of safety and enough flexibility to encourag	
Patterson, 2012	mean scale (0-100)		ing the initial period of this project was unexpected. We believed that changing the culture in a large urb	
Sexton, 2011	% positive response, p value		know the relative importance of each step of CUSP, or the extent to which ICUs fully implemented tho	
Tetuan, 2017	change in mean average of likert scale, p value		to patient safety, shared learning, involvement of leadership, and interdisciplinary collaboration have r	
Timmel, 2010	% positive response, p value		ss of rounds and nurse access to the physician. In addition, creating interdisciplinary rounds established	
Vigorito,	% positive response, p value		not. Similarly, CLABSI and VAP rates showed more improvement on units with an SAQAP, but not at th	
Watts, 2010	mean scale (0-100)		Jomains, we believe that interpretation of improvement in a specific domain must be done with caution	
AbuAlRub, 2014	% positive response, p value		Did not attribute the effects to specific features of the intervention	
Amiri, 2018	change in mean average of likert scale, p value		Attributes lack of effect to lack of involvement of higher level management.	
Basson	% positive response, p value		rganised in such a way as not to inhibit discussion among other staff members. 2) What also worked we	
Chera	% positive response, p value		ough reduced workload; and that multiple components of interventions are important; and that physici	
Edwards, 2008	change in mean average of likert scale, p value		Dimensions related to nonpunitive response to error, communicating and creating an open environmen	
Hefner, 2016	% positive response, p value		tient safety culture may be more highly influenced by CRM training than supervisor and management c	
Jones, F.	% positive response, p value		t the hypothesis that the perceptions of the culture of safety would improve after training. This finding	
Jones, K.	% positive response, p value		t the direction and magnitude of these changes varies by adopter category. In particular, individual resp	
Kousmanen	% positive response, p value		arn from each experience so that similar situations can be avoided in the future. The observed improv	
Ling	% positive response, p value		the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i	
Lopez-Jeng	% positive response, p value		porting system and creating a culture that encourages leaders to view problems as opportunities for im	
Lozito	% positive response, p value		ens and effect cannot be established, the implementation timing of the initiatives does suggest at least s	
Mazur	% positive response, p value		ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate	
Razzani	mean scale (0-100)		No change or effect was witnessed.	
Slater, 2012	n/a		Did not attribute the effects to specific features of the intervention	
AbuAlRub, 2014	% positive response, p value		Attributes lack of effect to lack of involvement of higher level management.	
Amiri, 2018	change in mean average of likert scale, p value		Attributes lack of effect to lack of involvement of higher level management.	
Edwards, 2008	change in mean average of likert scale, p value		Dimensions related to nonpunitive response to error, communicating and creating an open environmen	
Kousmanen	% positive response, p value		tions regarding patient safety" as it includes near-miss situations. Reporting these errors helps staff iden	
Hefner, 2016	% positive response, p value		tient safety culture may be more highly influenced by CRM training than supervisor and management c	
Jones, F.	% positive response, p value		t the hypothesis that the perceptions of the culture of safety would improve after training. This finding	
Jones, K.	% positive response, p value		t the direction and magnitude of these changes varies by adopter category. In particular, individual resp	
Ling	% positive response, p value		the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i	
Lopez-Jeng	% positive response, p value		roughout the project from inception to conclusion positively affected the composite score improveme	
Mazur	% positive response, p value		e and effect cannot be established, the implementation timing of the initiatives does suggest at least s	
Razzani	mean scale (0-100)		ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate	
Slater, 2012	n/a		No change or effect was witnessed.	
<i>Management Support for Patient Safety (HSOPS)</i>				
AbuAlRub, 2014	% positive response, p value		Attributes lack of effect to lack of involvement of higher level management.	
Amiri, 2018	change in mean average of likert scale, p value		Attributes lack of effect to lack of involvement of higher level management.	
Edwards, 2008	change in mean average of likert scale, p value		Dimensions related to nonpunitive response to error, communicating and creating an open environmen	
Kousmanen	% positive response, p value		tions regarding patient safety" as it includes near-miss situations. Reporting these errors helps staff iden	
Hefner, 2016	% positive response, p value		tient safety culture may be more highly influenced by CRM training than supervisor and management c	
Jones, F.	% positive response, p value		t the hypothesis that the perceptions of the culture of safety would improve after training. This finding	
Jones, K.	% positive response, p value		t the direction and magnitude of these changes varies by adopter category. In particular, individual resp	
Ling	% positive response, p value		the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i	
Lopez-Jeng	% positive response, p value		roughout the project from inception to conclusion positively affected the composite score improveme	
Mazur	% positive response, p value		e and effect cannot be established, the implementation timing of the initiatives does suggest at least s	
Razzani	mean scale (0-100)		ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate	
Slater, 2012	n/a		No change or effect was witnessed.	
<i>Management safety priority</i>				
<i>Management safety empowerment</i>				
<i>Management safety justice</i>				
<i>Workers' safety commitment</i>				
<i>Workers' safety priority and risk non-acceptance</i>				
<i>Safety communication, learning, and trust in co-workers competence</i>				
<i>Trust in the efficacy of safety systems</i>				
<i>Leadership Improvement (SCLS)</i>				
Ginsburg, 2005	% improvement was found to explain significant amounts of variance in all three patient safety culture measures; workshop attendance explained signifi			
Options of Safety				
<i>Safety Climate (SAQ)</i>				
Abtoss, 2011	% positive response, p value	Meta	not attribute changes to any specific features of the intervention	
Hinde, 2016	mean scale (0-100)		Did not attribute the effects to specific features of the intervention	
Frankel, 2008	% positive response, p value		pecifically dealt with discussing local patient safety concerns. In particular, improvement in the safety cl	
Kristensen, 2016	Both mean scale (0-100) and % positive response		Did not attribute the effects to specific features of the intervention	
Milton	% positive response, p value		Could not attribute changes to any specific features of the intervention.	
Paine, 2010	% positive response, p value		First, CUSP provides enough structure to establish a system of safety and enough flexibility to encourag	
Patterson, 2012	mean scale (0-100)		ing the initial period of this project was unexpected. We believed that changing the culture in a large urb	
Profit, 2014	% positive response, p value		requencies, formats, durations and even overall objectives for using WR. Using the WR feedback met	
Sexton, 2011	% positive response, p value		know the relative importance of each step of CUSP, or the extent to which ICUs fully implemented tho	
Tetuan, 2017	change in mean average of likert scale, p value		to patient safety, shared learning, involvement of leadership, and interdisciplinary collaboration have r	
Timmel, 2010	% positive response, p value		ss of rounds and nurse access to the physician. In addition, creating interdisciplinary rounds established	
Vigorito,	% positive response, p value		not. Similarly, CLABSI and VAP rates showed more improvement on units with an SAQAP, but not at th	
Watts, 2010	mean scale (0-100)		Jomains, we believe that interpretation of improvement in a specific domain must be done with caution	
AbuAlRub, 2014	% positive response, p value		Did not attribute the effects to specific features of the intervention	
Amiri, 2018	change in mean average of likert scale, p value		Attributes lack of effect to lack of involvement of higher level management.	
Edwards, 2008	change in mean average of likert scale, p value		Dimensions related to nonpunitive response to error, communicating and creating an open environmen	
Hefner, 2016	% positive response, p value		tient safety culture may be more highly influenced by CRM training than supervisor and management c	
Kousmanen	% positive response, p value		Did not attribute the effects to specific features of the intervention	
Jones, F.	% positive response, p value		t the hypothesis that the perceptions of the culture of safety would improve after training. This finding	
Jones, K.	% positive response, p value		t the direction and magnitude of these changes varies by adopter category. In particular, individual resp	
Ling	% positive response, p value		the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i	
Mazur	% positive response, p value		and effect cannot be established, the implementation timing of the initiatives does suggest at least s	
Profit, 2014	% positive response, p value		requencies, formats, durations and even overall objectives for using WR. Using the WR feedback met	
Razzani	mean scale (0-100)		ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate	
Slater, 2012	n/a		No change or effect was witnessed.	
Ginsburg, 2005	change in mean average of likert scale, p value		long those who participated in an intervention workshop suggesting that although these kinds of workst	
Benn, 2011	change in mean average of likert scale, p value		Program implementation factors explained the greatest amount of the variance.	
De Korne, 2014	double loop learning. Our positive findings on the use of video feedback are in line with earlier studies that showed that its use stimulates discussion an			
Dickens, 2020	change in mean average of likert scale, p value		ervention did not have an effect, with the exception of a small change to organisational culture (unexpl	
Perceived State of Safety (SCLS)				
<i>Safety Awareness (awareness of risks)</i>				
<i>Safety Attitude</i>				
Teamwork and Collaboration				
<i>Teamwork (SCC)</i>				
<i>Teamwork Climate (SAQ)</i>				
Benn, 2011	change in mean average of likert scale, p value		Program implementation factors explained the greatest amount of the variance.	
Abtoss, 2011	% positive response, p value	Meta	not attribute changes to any specific features of the intervention	
Dickens, 2020	change in mean average of likert scale, p value		pecifically dealt with discussing local patient safety concerns. In particular, improvement in the safety cl	
Frankel, 2008	% positive response, p value		mpowered to speak freely on behalf of their units. Open communication and mutual respect was pres	
Gupta, 2014	% positive response, p value		Did not attribute the effects to specific features of the intervention	
Hababbeh, 2020	change in mean average of likert scale, p value		Did not attribute the effects to specific features of the intervention	
Hinde, 2016	mean scale (0-100)		Did not attribute the effects to specific features of the intervention	
Kristensen, 2016	Both mean scale (0-100) and % positive response		It seems likely that teamwork climate was directly influenced by the leadership intervention.	
Milton	% positive response, p value		Could not attribute changes to any specific features of the intervention.	
Paine, 2010	% positive response, p value		First, CUSP provides enough structure to establish a system of safety and enough flexibility to encourag	
Patterson, 2012	mean scale (0-100)		ing the initial period of this project was unexpected. We believed that changing the culture in a large urb	
Profit, 2014	% positive response, p value		requencies, formats, durations and even overall objectives for using WR. Using the WR feedback met	
Pronovost, 2011	n/a		nce supporting system redesign), execution (provide the materials and resources to redesign work anc	
Sexton, 2011	% positive response, p value		know the relative importance of each step of CUSP, or the extent to which ICUs fully implemented tho	
Tetuan, 2017	change in mean average of likert scale, p value		to patient safety, shared learning, involvement of leadership, and interdisciplinary collaboration have r	
Timmel, 2010	% positive response, p value		ss of rounds and nurse access to the physician. In addition, creating interdisciplinary rounds established	
Watts, 2010	mean scale (0-100)		Jomains, we believe that interpretation of improvement in a specific domain must be done with caution	
Vigorito,	% positive response, p value		not. Similarly, CLABSI and VAP rates showed more improvement on units with an SAQAP, but not at th	
AbuAlRub, 2014	% positive response, p value		Did not attribute the effects to specific features of the intervention	
Amiri, 2018	change in mean average of likert scale, p value		uld suggest a similar empowerment program to improve teamwork within units and handoff and transi	
Edwards, 2008	change in mean average of likert scale, p value		Dimensions related to nonpunitive response to error, communicating and creating an open environmen	
Hefner, 2016	% positive response, p value		tient safety culture may be more highly influenced by CRM training than supervisor and management c	

Category	Author	Response	Notes		
Teamwork across Units (HSOPS)	Kousmanen	% positive response, p value	Did not attribute the effects to specific features of the intervention		
	Jones, F.	% positive response, p value	the hypothesis that the perceptions of the culture of safety would improve after training. This finding		
	Jones, K.	% positive response, p value	t the direction and magnitude of these changes varies by adopter category. In particular, individual resp		
	Ling	% positive response, p value	the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i		
	Mazur	% positive response, p value	e and effect cannot be established, the implementation timing of the initiatives does suggest at least sc		
	Proffit, 2014	% positive response, p value	requencies, formats, durations and even overall objectives for using WR. Using the WR feedback met		
	Razzani	mean scale (0-100)	ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate		
	Slater, 2012	n/a	No change or effect was witnessed.		
	AbuAlRub, 2014	% positive response, p value	Did not attribute the effects to specific features of the intervention		
	Amiri, 2018	change in mean average of likert scale, p value	No. Had expected supervisor involvement in the intervention to affect this, but there was no effect.		
	Edwards, 2008	change in mean average of likert scale, p value	Dimensions related to nonpunitive response to error, communicating and creating an open environmen		
	Handoffs and Transitions (HSOPS)	Hefner, 2016	% positive response, p value	tient safety culture may be more highly influenced by CRM training than supervisor and management c	
Kousmanen		% positive response, p value	Did not attribute the effects to specific features of the intervention		
Jones, F.		% positive response, p value	t the hypothesis that the perceptions of the culture of safety would improve after training. This finding		
Jones, K.		% positive response, p value	t the direction and magnitude of these changes varies by adopter category. In particular, individual resp		
Ling		% positive response, p value	the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i		
Lopez-Jeng		% positive response, p value	ystem during both the safety culture surveys and the educational sessions, which improved the percept		
Mazur		% positive response, p value	e and effect cannot be established, the implementation timing of the initiatives does suggest at least sc		
Razzani		mean scale (0-100)	ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate		
Slater, 2012		n/a	No change or effect was witnessed.		
AbuAlRub, 2014		% positive response, p value	Did not attribute the effects to specific features of the intervention		
Amiri, 2018		change in mean average of likert scale, p value	Attributes lack of effect to lack of involvement of higher level management.		
Teamwork (CAS)		Edwards, 2008	change in mean average of likert scale, p value	Dimensions related to nonpunitive response to error, communicating and creating an open environmen	
	Hefner, 2016	% positive response, p value	tient safety culture may be more highly influenced by CRM training than supervisor and management c		
	Kousmanen	% positive response, p value	Did not attribute the effects to specific features of the intervention		
	Jones, F.	% positive response, p value	t the hypothesis that the perceptions of the culture of safety would improve after training. This finding		
	Jones, K.	% positive response, p value	t the direction and magnitude of these changes varies by adopter category. In particular, individual resp		
	Ling	% positive response, p value	the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i		
	Lopez-Jeng	% positive response, p value	ystem during both the safety culture surveys and the educational sessions, which improved the percept		
	Mazur	% positive response, p value	e and effect cannot be established, the implementation timing of the initiatives does suggest at least sc		
	Razzani	mean scale (0-100)	ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate		
	Slater, 2012	n/a	No change or effect was witnessed.		
	Reszel, 2019	change in mean average of likert scale, p value	res of other published work that are considered important: examples of key elements of these other ini		
	Interdisciplinary teamwork	Slater, 2012	Qualitative Content Analysis	ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate	
Zhu, 2020		change in mean average of likert scale, p value	atures are highlighted as directly influencing the staff outcomes. They do mention that face to face com		
Reszel, 2019		content analysis of interview data	cence, program implementation. Participants did not attribute these developments to elements of the i		
Patient safety is everyone's priority (CAS)		De Korne, 2014	double loop learning. Our positive findings on the use of video feedback are in line with earlier studies that showed that its use stimulates discussion an		
		Working Conditions (SAQ)	Tetuan, 2017	change in mean average of likert scale, p value	to patient safety, shared learning, involvement of leadership, and interdisciplinary collaboration have n
			Benn, 2011	change in mean average of likert scale, p value	Program implementation factors explained the greatest amount of the variance.
			Dickens, 2020	change in mean average of likert scale, p value	ervention did not have an effect, with the exception of a small change to organisational culture (unexpl
			Ginsburg, 2005	change in mean average of likert scale, p value	icipation explained additional variance over and above the variables just described only for the valuing s
			Reszel, 2019	change in mean average of likert scale, p value	res of other published work that are considered important: examples of key elements of these other ini
			Abstoss, 2011	% positive response, p value	Meta not attribute changes to any specific features of the intervention
			Dickens, 2020	change in mean average of likert scale, p value	ervention did not have an effect, with the exception of a small change to organisational culture (unexpl
			Frankel, 2008	% positive response, p value	pecifically dealt with discussing local patient safety concerns. In particular, improvement in the safety cl
	Hababbeh, 2020		change in mean average of likert scale, p value	Did not attribute the effects to specific features of the intervention	
	Kristensen, 2016		Both mean scale (0-100) and % positive response	Did not attribute the effects to specific features of the intervention	
	Milton		% positive response, p value	Could not attribute changes to any specific features of the intervention.	
Paine, 2010	% positive response, p value		First, CUSP provides enough structure to establish a system of safety and enough flexibility to encourag		
Patterson, 2012	mean scale (0-100)	ing the initial period of this project was unexpected. We believed that changing the culture in a large urb			
Sexton, 2011	% positive response, p value	know the relative importance of each step of CUSP, or the extent to which ICUs fully implemented tho			
Tetuan, 2017	change in mean average of likert scale, p value	to patient safety, shared learning, involvement of leadership, and interdisciplinary collaboration have r			
Timmel, 2010	% positive response, p value	ss of rounds and nurse access to the physician. In addition, creating interdisciplinary rounds established			
Watts, 2010	mean scale (0-100)	Jomains, we believe that interpretation of improvement in a specific domain must be done with caution			
Staffing (HSOPS)	Vigorito,	% positive response, p value	f not. Similarly, CLABSI and VAP rates showed more improvement on units with an SAQAP, but not at th		
	AbuAlRub, 2014	% positive response, p value	Did not attribute the effects to specific features of the intervention		
	Amiri, 2018	change in mean average of likert scale, p value	Attributes lack of effect to lack of involvement of higher level management.		
	Edwards, 2008	change in mean average of likert scale, p value	Dimensions related to nonpunitive response to error, communicating and creating an open environmen		
	Hefner, 2016	% positive response, p value	tient safety culture may be more highly influenced by CRM training than supervisor and management c		
	Kousmanen	% positive response, p value	Did not attribute the effects to specific features of the intervention		
	Jones, F.	% positive response, p value	t the hypothesis that the perceptions of the culture of safety would improve after training. This finding		
	Jones, K.	% positive response, p value	t the direction and magnitude of these changes varies by adopter category. In particular, individual resp		
	Ling	% positive response, p value	the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i		
	Mazur	% positive response, p value	e and effect cannot be established, the implementation timing of the initiatives does suggest at least sc		
	Razzani	mean scale (0-100)	ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate		
	Slater, 2012	n/a	No change or effect was witnessed.		
Frequency of Events Reported (HSOPS)	Milton	% positive response, p value	Could not attribute changes to any specific features of the intervention.		
	AbuAlRub, 2014	% positive response, p value	Did not attribute the effects to specific features of the intervention		
	Amiri, 2018	change in mean average of likert scale, p value	Attributes lack of effect to lack of involvement of higher level management.		
	Basson				
	Edwards, 2008	change in mean average of likert scale, p value	Dimensions related to nonpunitive response to error, communicating and creating an open environmen		
	Hefner, 2016	% positive response, p value	tient safety culture may be more highly influenced by CRM training than supervisor and management c		
	Kousmanen	% positive response, p value	e atmo- sphere (El-Jardali et al., 2011). In fact, we believe that results regarding the "Nonpunitive resp		
	Jones, F.	% positive response, p value	t the hypothesis that the perceptions of the culture of safety would improve after training. This finding		
	Jones, K.	% positive response, p value	t the direction and magnitude of these changes varies by adopter category. In particular, individual resp		
	Ling	% positive response, p value	the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i		
	Mazur	% positive response, p value	e and effect cannot be established, the implementation timing of the initiatives does suggest at least sc		
	Razzani	mean scale (0-100)	ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate		
Slater, 2012	n/a	No change or effect was witnessed.			
Reporting of near misses	AbuAlRub, 2014	% positive response, p value	Did not attribute the effects to specific features of the intervention		
	Amiri, 2018	change in mean average of likert scale, p value	nt program was not sufficient to improve three important dimensions: staffing, error reporting, and no		
	Basson				
	Bliegen				
	Edwards, 2008	change in mean average of likert scale, p value	Dimensions related to nonpunitive response to error, communicating and creating an open environmen		
	Hefner, 2016	% positive response, p value	tient safety culture may be more highly influenced by CRM training than supervisor and management c		
	Kousmanen	% positive response, p value	e atmo- sphere (El-Jardali et al., 2011). In fact, we believe that results regarding the "Nonpunitive resp		
	Jones, F.	% positive response, p value	t the hypothesis that the perceptions of the culture of safety would improve after training. This finding		
	Jones, K.	% positive response, p value	t the direction and magnitude of these changes varies by adopter category. In particular, individual resp		
	Ling	% positive response, p value	the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i		
	Mazur	% positive response, p value	e and effect cannot be established, the implementation timing of the initiatives does suggest at least sc		
	Razzani	mean scale (0-100)	ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate		
Slater, 2012	n/a	No change or effect was witnessed.			
Information Processes (SCC)	Ginsburg, 2005	change in mean average of likert scale, p value	repercussions culture variable suggesting that, together, leadership for improvement and training work		
	De Korne, 2014	double loop learning. Our positive findings on the use of video feedback are in line with earlier studies that showed that its use stimulates discussion an			
	Benn, 2011	change in mean average of likert scale, p value	Program implementation factors explained the greatest amount of the variance.		
	Feedback and Communication about Error (HSOP)	AbuAlRub, 2014	% positive response, p value	Did not attribute the effects to specific features of the intervention	
		Amiri, 2018	change in mean average of likert scale, p value	Was the strongest domain in the results but was not discussed in relation to the intervention	
		Basson			
		Bliegen			
		Edwards, 2008	change in mean average of likert scale, p value	Dimensions related to nonpunitive response to error, communicating and creating an open environmen	
		Hefner, 2016	% positive response, p value	tient safety culture may be more highly influenced by CRM training than supervisor and management c	
		Kousmanen	% positive response, p value	arn from each experience so that similar situations can be avoided in the future. The observed improve	

Openness	Communication Openness (HSOPS)	Jones, F.	% positive response, p value	t the hypothesis that the perceptions of the culture of safety would improve after training. This finding t the direction and magnitude of these changes varies by adopter category. In particular, individual resp the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i e and effect cannot be established, the implementation timing of the initiatives does suggest at least sc : frequencies, formats, durations and even overall objectives for using WR. Using the WR feedback meti ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate No change or effect was witnessed.	
		Jones, K.	% positive response, p value		
		Ling	% positive response, p value		
		Mazur	% positive response, p value		
		Proffit, 2014	% positive response, p value		
		Razzani	mean scale (0-100)		
		Slater, 2012	n/a		
		AbuAlRub, 2014	% positive response, p value		Did not attribute the effects to specific features of the intervention
		Amiri, 2018	change in mean average of likert scale, p value		Improved after the intervention. Training in speaking up may have contributed to this.
		Edwards, 2008	change in mean average of likert scale, p value		Dimensions related to nonpunitive response to error, communicating and creating an open environmen itient safety culture may be more highly influenced by CRM training than supervisor and management c
Hefner, 2016	% positive response, p value	Did not attribute the effects to specific features of the intervention			
Kousmanen	% positive response, p value	t the hypothesis that the perceptions of the culture of safety would improve after training. This finding t the direction and magnitude of these changes varies by adopter category. In particular, individual resp the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i e and effect cannot be established, the implementation timing of the initiatives does suggest at least sc : frequencies, formats, durations and even overall objectives for using WR. Using the WR feedback meti ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate They only dimension in Slater et al to experience a change.			
Jones, F.	% positive response, p value	res of other published work that are considered important: examples of key elements of these other initi atures are highlighted as directly influencing the staff outcomes. They do mention that face to face com Program implementation factors explained the greatest amount of the variance.			
Jones, K.	% positive response, p value				
Ling	% positive response, p value				
Mazur	% positive response, p value				
Proffit, 2014	% positive response, p value				
Razzani	mean scale (0-100)				
Slater, 2012	n/a				
Rezzel, 2019	change in mean average of likert scale, p value				
Zhu, 2020	change in mean average of likert scale, p value				
Benn, 2011	change in mean average of likert scale, p value				
Slater, 2012	Qualitative Content Analysis	ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate			
Learning and Improvement	Organisational Learning / Continuous Improvement (h)	AbuAlRub, 2014	% positive response, p value	Did not attribute the effects to specific features of the intervention	
		Amiri, 2018	change in mean average of likert scale, p value	Was the strongest domain in the results but was not discussed in relation to the intervention	
		Basson			
		Blegen			
		Edwards, 2008	change in mean average of likert scale, p value	Dimensions related to nonpunitive response to error, communicating and creating an open environmen itient safety culture may be more highly influenced by CRM training than supervisor and management c	
		Hefner, 2016	% positive response, p value	t the hypothesis that the perceptions of the culture of safety would improve after training. This finding t the direction and magnitude of these changes varies by adopter category. In particular, individual resp the intervention or if the intervention guarded against the worst effects of the deterioration. Whether i e and effect cannot be established, the implementation timing of the initiatives does suggest at least sc : frequencies, formats, durations and even overall objectives for using WR. Using the WR feedback meti ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate No change or effect was witnessed.	
		Jones, F.	% positive response, p value	res of other published work that are considered important: examples of key elements of these other initi atures are highlighted as directly influencing the staff outcomes. They do mention that face to face com Program implementation factors explained the greatest amount of the variance.	
		Jones, K.	% positive response, p value		
		Ling	% positive response, p value		
		Mazur	% positive response, p value		
Razzani	mean scale (0-100)				
Slater, 2012	n/a				
Rezzel, 2019	change in mean average of likert scale, p value				
Benn, 2011	change in mean average of likert scale, p value				
Dickens, 2020	change in mean average of likert scale, p value	ervention did not have an effect, with the exception of a small change to organisational culture (unexpl			
Slater, 2012	Qualitative Content Analysis	ngs of the present study, Valenti et al. (2014) asserted in their study that patient safety culture is relate			
Safety of Human Limits	Stress Recognition (SAQ)	Abtoss, 2011	% positive response, p value	Meta not attribute changes to any specific features of the intervention	
		Dickens, 2020	change in mean average of likert scale, p value	ervention did not have an effect, with the exception of a small change to organisational culture (unexpl: specifically dealt with discussing local patient safety concerns. In particular, improvement in the safety cl	
		Frankel, 2008	% positive response, p value	Did not attribute the effects to specific features of the intervention	
		Hababbeh, 2020	change in mean average of likert scale, p value	Did not attribute the effects to specific features of the intervention	
		Kristensen, 2016	Both mean scale (0-100) and % positive response	exercises, which may have made them more realistic or critical in their assessment of the PSC, possib Could not attribute changes to any specific features of the intervention.	
		Milton	% positive response, p value	Could not attribute changes to any specific features of the intervention.	
		Paine, 2010	% positive response, p value	First, CUSP provides enough structure to establish a system of safety and enough flexibility to encourag	
		Patterson, 2012	mean scale (0-100)	ig the initial period of this project was unexpected. We believed that changing the culture in a large urb	
		Sexton, 2011	% positive response, p value	: know the relative importance of each step of CUSP, or the extent to which ICUs fully implemented the	
		Tetuan, 2017	change in mean average of likert scale, p value	to patient safety, shared learning, involvement of leadership, and interdisciplinary collaboration have r	
Timmel, 2010	% positive response, p value	ss of rounds and nurse access to the physician. In addition, creating interdisciplinary rounds established			
Watts, 2010	mean scale (0-100)	domains, we believe that interpretation of improvement in a specific domain must be done with caution			
Vigorito,	% positive response, p value	not. Similarly, CLABSI and VAP rates showed more improvement on units with an SAQAP, but not at th			
Well-Being	Job Satisfaction (SAQ)	Abtoss, 2011	% positive response, p value	Meta not attribute changes to any specific features of the intervention	
		Dickens, 2020	change in mean average of likert scale, p value	ervention did not have an effect, with the exception of a small change to organisational culture (unexpl: specifically dealt with discussing local patient safety concerns. In particular, improvement in the safety cl	
		Frankel, 2008	% positive response, p value	Did not attribute the effects to specific features of the intervention	
		Hababbeh, 2020	change in mean average of likert scale, p value	Did not attribute the effects to specific features of the intervention	
		Kristensen, 2016	Both mean scale (0-100) and % positive response	Did not attribute the effects to specific features of the intervention	
		Milton	% positive response, p value	Could not attribute changes to any specific features of the intervention.	
		Paine, 2010	% positive response, p value	First, CUSP provides enough structure to establish a system of safety and enough flexibility to encourag	
		Patterson, 2012	mean scale (0-100)	ig the initial period of this project was unexpected. We believed that changing the culture in a large urb	
		Sexton, 2011	% positive response, p value	: know the relative importance of each step of CUSP, or the extent to which ICUs fully implemented the	
		Tetuan, 2017	change in mean average of likert scale, p value	to patient safety, shared learning, involvement of leadership, and interdisciplinary collaboration have r	
Timmel, 2010	% positive response, p value	ss of rounds and nurse access to the physician. In addition, creating interdisciplinary rounds established			
Watts, 2010	mean scale (0-100)	domains, we believe that interpretation of improvement in a specific domain must be done with caution			
Vigorito,	% positive response, p value	not. Similarly, CLABSI and VAP rates showed more improvement on units with an SAQAP, but not at th			
Proffit, 2014	mean scale (0-100)	: frequencies, formats, durations and even overall objectives for using WR. Using the WR feedback meti			
Rezzel, 2019	change in mean average of likert scale, p value	res of other published work that are considered important: examples of key elements of these other initi			
Rezzel, 2019	change in mean average of likert scale, p value	res of other published work that are considered important: examples of key elements of these other initi			