<div align="right"><h2>ORIGINAL ARTICLE</h2></div>

Restorative just culture significantly improves stakeholder inclusion, second victim experiences and quality of recommendations in incident responses

Kathryn Turner*[1,2], Jerneja Sveticic[2], Diana Grice[2], Matthew Welch[2], Catherine King[2], Jenni Panther[2], Claire Strivens[2], Brad Whitfield[2], Geoffrey Norman[2], Alice Almeida-Crasto[2], Tamirin Darch[2], Nicolas J.C. Stapelberg[2,3], Sidney Dekker[4]

[1]*Metro North Mental Health, Metro North Health, Queensland, Australia*
[2]*Mental Health and Specialist Services, Gold Coast Hospital and Health Services, Queensland, Australia*
[3]*Faculty of Health Sciences & Medicine, Bond University, Queensland, Australia*
[4]*School of Humanities, Languages and Social Science, Griffith University, Queensland, Australia*

ABSTRACT

Objective: Matching safety and quality improvements to the complexity of healthcare, Gold Coast Mental Health and Specialist Services implemented a new response to clinical incidents: the Gold Coast Clinical Incident Response Framework (GC-CIRF). It utilises a Restorative Just Culture (RJC) framework and Safety II principles. This paper evaluates its impact.
Methods: Staff surveys measured perceptions of just culture and second victim experiences. Quality of recommendations were compared before and after implementation. For the 19 incidents that occurred after the implementation of GC-CIRF, audits of the review processes were undertaken, measuring several components.
Results: Results show significant improvement in staff perceptions of just culture and second victim experiences. Review of incident review data showed several shifts in line with Safety II and RJC. The process audit demonstrated inclusion of a broad range of stakeholders, and significant improvements in the quality and strength of recommendations.
Conclusions: Embedding RJC and Safety II concepts into the incident review process is associated with improved measures of culture and review outputs. The integration of Safety II concepts and support of cultural shifts will require further work and committed leadership at all levels.

Key Words: Restorative just culture, Just culture, Zero suicide framework, Clinical incidents, Safety II, Resilient healthcare, Complex systems, Second victim, Human error and patient safety, Root cause analysis

1. INTRODUCTION

Current approaches to improving healthcare safety and quality are not unequivocally successful.[1–3] One reason is that our growing understanding of the complexity of healthcare is yet to be adequately reflected in our approaches to adverse event investigation and in our safety and quality improvements.[4,5] Seeing complex systems as componential and linear ("Safety I"[6]), these approaches tend to reduce an ad-

verse event to a "cause' or a broken part that can be fixed with a policy, rule or poster.[7, 8] In mental health it can drive restrictive practices, risk secrecy and underreporting because of the backward-looking accountability of traditional, retributive just cultures that are organized around individual actions, transgressions and consequences.[9–12] In contrast, openness about potential harm and psychological safety allowing for all parties to tell their stories can provide a strong driver for learning and improvements[13] and has been found to be associated with lower mortality rates.[14]

Restorative Just Culture (RJC) sees safety ("Safety II") coming from the resilience and adaptations to respond to challenges[15, 16] even if these fall outside the scope of design, training or quality initiatives.[17] Forward-looking accountability explores the impacts and needs that result from an incident, and the obligations on all stakeholders to improve safety according to their roles and responsibilities.[18] RJC promotes healing, learning and quality improvement by asking what needs to be done to set people up for success, including consumers, families, clinicians and organizational stakeholders.[19] It tends to capture the complexities of both "causes" and improvements because of the broader, forward-looking conversations it engenders.[20] This means understanding why things mostly go well even under varying conditions, and identifying and enhancing the adaptive capacities in people, teams and processes that make this possible.[21] For example, Turner et al.[22] outlined the benefits of a move away from traditional approaches of responding to critical incidents in the context of implementing a Zero Suicide Framework (ZSF) within a health setting,[23] which can increase ownership of the people involved in embedding solutions,[24, 25] while also noting the broader applicability of RJC.

1.1 Gold Coast Clinical Incident Response Framework (GC-CIRF)

Gold Coast Mental Health and Specialist Services (GCMHSS) is a directorate within the Gold Coast Hospital and Health Service (GCHHS) and provides integrated mental health and drug and alcohol services across all ages to an estimated population of 600,000 people. Turner et al.[22] described the Gold Coast Clinical Incident Response Framework (GC-CIRF) using RJC and Safety II principles, structured around building culture, healing and "learning anything" rather than a narrow linear focus on cause close to the frontline or proximal to the incident, leading to recommendations of high quality and strength.[26] It asks stakeholders who is impacted, what do they need, and who has the obligation to meet that need. The following components of GC-CIRF were implemented at GCMHSS and are summarised

in Figure 1:

- Responding to consumers, carers and families using the STARS Tool[27] (Sorry, Tell me about it, Answer questions, Response, Summarise);
- Responding specifically to staff[28] based on Scott's[29] three-tier model of volunteer peer support with psychological first aid, Denham's[30] 5 rights and the GRACE model of compassion;[31]
- Weekly triage process of clinical incidents to assess the need for formal review and through what methodology. Root Cause Analyses (RCAs) are typically avoided as they use a team entirely external to the treating team;
- Comprehensive Incident Review Process consisting of: (1) immediate response by the responsible consultant and team leader, (2) engagement with the family about their understanding, concerns, questions, and recommendations, (3) review of the "clinical care pathway" including timeline, work as done, areas of good practice, and interactions using a constellation diagram,[32] (4) validation of findings, lessons and recommendations, (5) reflection on feedback from leadership and to development of action, and (6) report endorsement and open disclosure with family;
- Training of clinicians, leaders and facilitators in incident review, RJC and disclosure;
- Guide provided to make recommendations SMARTER (Specific, Measurable, Accountable, Realistic, Timely, Effective/Evaluation, Reviewed) and strong (using hierarchy of hazard controls);[26]
- Continuous quality improvement[23] including assessment of all comprehensive reviews and recommendations;[33]
- Gathering feedback via semi-structured interviews from all stakeholders, including staff, family and carers.

2. METHODS

The GC-CIRF evaluation components are summarised in Figure 2. GC-CIRF was evaluated by seeking evidence of:

(1) Improvement in Just Culture and Second Victim experiences. Assessed via the Voice of Staff Survey, introduced at GCMHSS in 2016 (and repeated in 2017 and 2019). The survey was distributed to all clinical staff across Gold Coast Mental Health and Specialist Services. 2017 and 2019 included the Just Culture Assessment Tool[34] and Second Victim Experience and Support Tool.[35] Results of the Voice of Staff Survey were analysed, comparing outcomes from 2017 (N = 297, 45% of GCMHSS workforce) and 2019 (N = 315, 50% of all workforce).[36]
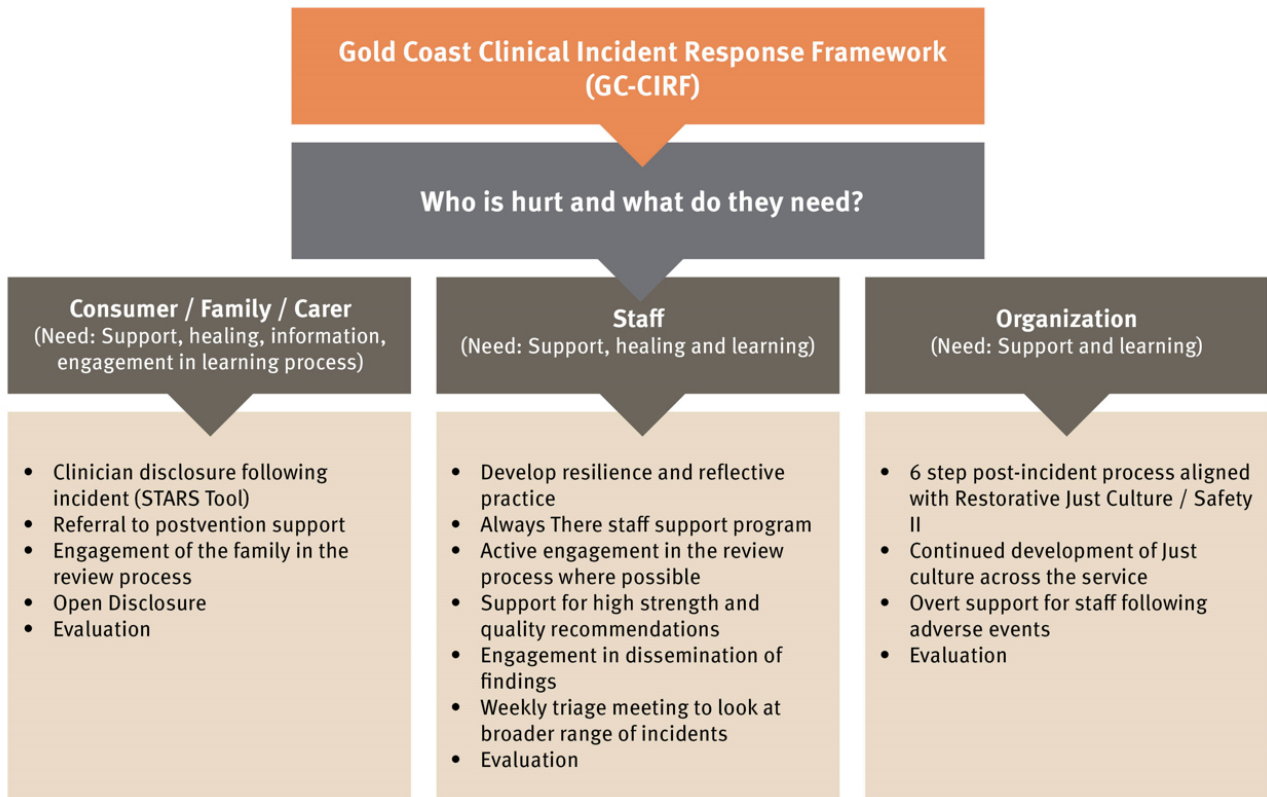
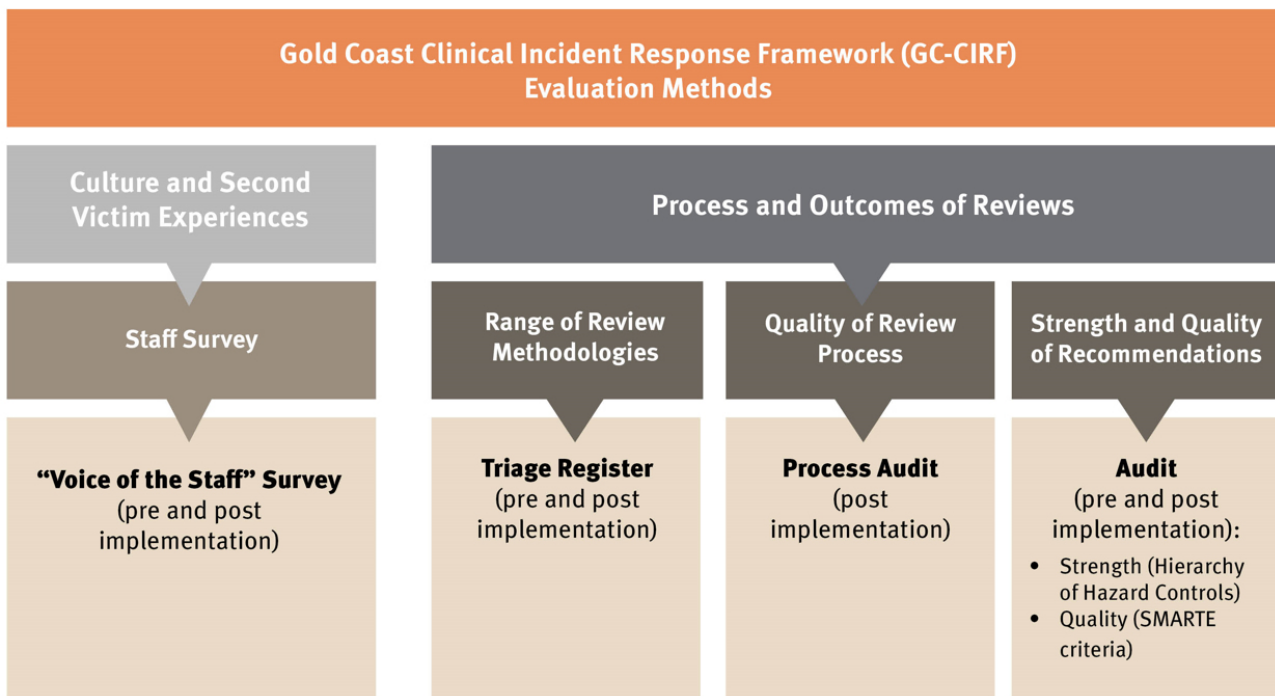**Figure 1.** Gold Coast Clinical Incident Response Framework (GC-CIRF)

Figure 2. Gold Coast Clinical Incident Response Framework: Evaluation methods

(2) A service that is now learning from a wider range of incidents and with a greater inclusion of stakeholders. Assessed via a register at GCMHSS on all incidents discussed at weekly triage meetings with the leadership of GCMHSS, and records of the type of incident and review, inclusion of team members and leadership, and family or carer's input.

(3) The quality of the incident review process. There were 19 incidents that were reviewed in the 1 year post implementation of GC-CIRF. These were anlaysed using an adaptation of tool of the Dutch Healthcare Inspectorate,[33] which contained 44 questions on immediate response, review process, reconstruction, analysis, conclusions, recommendations, and follow through/close the loop.

(4) Improvements in the quality and strength of recommendations of post-incident reviews. An audit was undertaken to review the quality and strength of recommendations of all reviews in the two years prior to the implementation of GC-CIRF (October 2016 – October 2018; N = 39 incidents, producing 72 recommendations), and in the 12 months after (November 2018 – October 2019; N = 19 incidents, producing 75 recommendations).[37–40] The strength of recommendations was based on a hierarchy of hazard controls[41] and relates to the likelihood of its implementation preventing the unwanted event where "weak" relies on individual behaviour (policy, procedure, rules, warnings), "moderate" targets systems but remains reliant on individual vigilance (e.g. software enhancements, elimination of distractions, audits or increased staffing); and "strong" simplifies processes, strengthens clinical governance or standardises care. Quality was assessed using "SMARTE" criteria,[41] which included domains of specific, measurable, accountable, realistic, timely and effective/evaluated. Two auditors independently assessed 10 incident reviews, cross-collated results to establish inter-coder reliability and engaged a third auditor when the analysis was ambiguous.

Descriptive anlyses were performed for all four study components, and changes in the results between the period before and after the implementation of GC-CIRF were anlaysed using t-tests and Chi square tests. Statistical significance was set at $p < .05$. All analyses were conducted using the IBM SPSS 25.0.

3. RESULTS

3.1 Voice of the staff (VOS) survey
In 2017, 20% of GCMHSS staff felt blamed for adverse events, and 35% feared consequences of involvement in an event, which caused psychological and physical distress and feelings of inadequacies in patient care ability. A third of staff reported that the organisation did not show concern for their well-being following an incident.[36] Statistically significant changes were seen in the 2019 survey (at level of $p < .05$) including:

- Fewer staff reported being afraid of disciplinary actions (27.3% vs. 34.9%) or of being blamed when involved in an event (16.5% vs. 20.3%);
- More staff expressed trust in the hospital to handle these events fairly (40.3% vs. 25.3%) and believed that the hospital sees clinical incidents as opportunities for improvement (56.8% vs 43.2%);
- More staff felt that the organisation understands they may need help with effects of their involvement in incidents (61.1% vs. 54.9%), and agreed or strongly agreed that the organisation offers resources in overcoming these effects (62.2% vs. 42.2%); and
- 50.0% disagreed that the organisation does not show concern for the well-being of staff involved in incidents (increase from 39.3% in 2017).

Importantly, a statistically significant association was noted between the staff's ability to actively participate in the incident review process and more positive perception on all domains of just culture, less distress and negative impacts on their professional self-efficacy following involvement in incidents, perceived higher levels of support from work and non-work related sources, and lower turnover intentions and reported absenteeism.[36]

3.2 Triage data
Prior to 2018, the primary focus of GCMHSS (in line with the broader health service) was on reviews of reportable events, and largely for consumers meeting the criteria of the suspected suicide of a person with a mental illness who is under the care of a mental health service. Gradually, from 2018, with the introduction of GC-CIRF, a larger range of incidents were considered to undergo a review and thus contribute to a learning process (see Table 1).

Since the implementation of GC-CIRF, just under half of reviewed incidents were classified as SAC1 (incident resulting in death/permanent harm), with the remaining ones classified as either SAC2 (21.1%) or Significant events (31.6%). "Significant Events" were defined by GCMHSS to include events that provided an opportunity for significant learning but were not reportable events and included but not limited to suicide attempts and "near misses". A decision to label an event as a Significant Event is made in the GCMHSS Triage Committee.

Table 1. Types of incidents and review methodologies, before and after the implementation of GC-CIRF

	Before GC-CIRF (Oct 2016 – Oct 2018) N = 39		After GC-CIRF (Nov 2018 – Oct 2019) N = 19	
	N	%	N	%
Event				
Death by suicide	34	87.2%	8	42.1%
Suicide attempt	2	5.1%	7	36.8%
Death - head injury	2	5.1%		
MHA breach			1	5.3%
Physical deterioration	1	2.6%		
Seclusion			1	5.3%
Unexplained death			1	5.3%
Violence incident			1	5.3%
Classification of Event				
SAC 1	39	100.0%	9	47.4%
SAC 2			4	21.1%
Significant event			6	31.6%
Review Methodology				
HEAPS	33	84.6%	1	5.3%
MHSS Comprehensive Review (Patient Safety facilitated)			14	73.7%
MHSS Comprehensive Review (MHSS facilitated)			4	21.1%
Root Cause Analysis (RCA)	6	15.4%		

Note. MHA – Mental Health Act; SAC – Severity Assessment Code; HEAPS – Human Error and Patient Safety incident review approach; RCA – Root Cause Analysis

The implementation of GC-CIRF also led to greater variation in the methodologies applied in incident reviews, with most reviews using the MHSS Comprehensive Review facilitated by Patient Safety (73.7%), followed by MHSS-facilitated Comprehensive Reviews, and only one incident undergoing the HEAPS review. No incidents were reviewed using the RCA methodology, compared to 15.4% in the period prior to GC-CIRF. Anecdotally, there had already been a deliberate and large move away from RCA approaches prior to 2017, in recognition of the limited learnings that were being identified in RCAs.

Since November 2018, reviews of all incidents included in this analysis produced recommendations (compared to 78.1% in the "before" period, Fisher test $p = .010$), and the average number of recommendations per incident was significantly higher than before the implementation of GC-CIRF (3.9 vs. 1.9; $t(56) = -3.47$, $p = .001$).

3.3 Process audit
Incidents reviewed in the period post implementation of GC-CIRF (N = 19) also underwent an audit of the review process examining 7 dimensions: Immediate response, Review pro-

cess, Reconstruction, Analysis, Conclusions, Recommendations, and Follow through (see Appendix 1).

In the aftermath of the incident, Clinician Disclosure was offered in 17 and occurred in 15 out of 19 incidents, most commonly 1 or 2 days after the incident. In all incidents, staff were offered support following the incident. The review teams had good multidisciplinary representations, representations from relevant members of the clinical team, trained facilitator and peer clinical experts. Only 2 incidents out of 19 incidents included representatives from external organisations.

Just over half of incidents included in the audit (57.9%) had a record of seeking input from consumers or their carers, or subsequent consideration of their feedback. When feedback was sought, 100% agreed to it, and all reviews considered the feedback.

There is evidence of regular completion of different methodologies used to identify underlying causes or contributing factors of the incident, such as Chain of events, Human factors analysis or Diagramming. All incident reviews considered adherence to relevant guideline/protocols, and in 73.7%,

reports articulated whether the care provided was in line with evidence-based practice.

Evaluation of conclusions confirmed that contributing factors, existing service developments aimed at addressing similar issues, and examples of high-quality care were identified in almost all incidents. Similarly, all incident reviews had articulated recommendations that followed the SMARTE framework.

In regard to "Follow through" actions, just under half of incident reviews were completed within the appropriate time frame, and in only 8 out of 19 cases, feedback on the incident review was provided to the consumers or their carers through the Formal open disclosure (FOD). While this accounted

for less than half of reviewed incidents (42.1%), it is worth noting that FOD was offered to 100% of SAC1/reportable events (and all but one family accepted). On the other hand, none of the other incidents received FOD, which is due to the fact that at the time of conducting this study, processes were in place to support FOD for reportable events but not for the other Comprehensive Reviews (non-SAC1 incidents/events) undertaken. Processes have subsequently been updated to ensure FOD is also offered to consumers and families for non-SAC1 incidents.

3.4 Audit of recommendations

Quality of recommendations was assessed against the SMARTE criteria, as shown in Table 2.

Table 2. Quality of recommendations, before and after the implementation of GC-CIRF

	Before GC-CIRF (Oct 16 – Oct 18) N = 72		After GC-CIRF (Nov 18 – Oct 19) N = 75		Difference (*p* value)
	N	%	N	%	
Specific					
The aim of the proposed recommendation is clear.	56	78.9%	70	93.3%	.011[*]
Measurable					
The recommendation demonstrates an impact on process and outcomes.	48	67.6%	57	76.0%	.259
The recommendation includes a substantive measure of performance improvement.	0	0.0%	6	8.0%	.028[*]
The recommendation includes an aspirational target.	3	4.2%	3	4.0%	.945
Accountability					
There is a single point position of accountability responsible for follow-through of recommendation.	69	97.2%	74	98.7%	.528
Realistic					
Recommendation is achievable within available resources, is likely to be accepted and implemented.	65	91.5%	72	96.0%	.264
There is evidence from the narrative that there are issues identified that have not resulted in recommendations.	2	7.7%	4	25.0%	.120
These issues are being addressed by alternative means.	1	3.8%	4	25.0%	.096
There is evidence that review team did not propose a recommendation as they were inhibited by concern of the ability to implement.	0	0.0%	1	6.7%	.279
Timely					
Recommendation has a clear timeline for implementation.	68	95.8%	74	98.7%	.258
Effective/Evaluated					
Recommendation will actually make a difference to the identified issue.	46	64.8%	60	81.0%	.039
Evidence base for the recommendation is cited.	4	5.6%	8	10.7%	.268
There is a plan to determine if the recommendations are implemented.	46	64.8%	72	96.0%	< .001[**]
There is a documented plan to evaluate effectiveness of the recommendation to address the identified issue.	5	7.0%	17	22.7%	.008[*]
The evaluation embedded into business as usual.	4	5.6%	9	12.0%	.205

Note. [*] Statistically significant at level *p* < .05; [**] Statistically significant at level *p* < .001

Results in Table 2 show that all indicators of the quality of recommendations have improved since the implementation of GC-CIRF, though not all reached a level of statistical significance. Most notable improvements are seen in the domain of Effectiveness/Evaluation, with 96.0% of recommendations including a plan to determine if the recommendation has been implemented (increase from 64.8%; $p < .001$), and a plan to evaluate the effectiveness of the recommendation (22.7% vs. 7.0%; $p < .05$). Further, auditors considered 81.0% of recommendations made since GC-CIRF as making a difference to the identified issue (increase from 64.8%; $p < .05$). The implementation of GC-CIRF has contributed to the development of more specific recommendations with clearer aims (noted in 93.3% of cases, increase from 78.9%; $p < .05$), and more measurable recommendations that included a substantive measure of performance improvement (noted in 8.0% of cases, but in no cases prior to November 2018).

Figure 3. Strength of recommendations before and after the implementation of Clinical Incident Response Framework (GC-CIRF), as assessed by incident review teams and auditors

We also analysed changes in the strength of recommendations, as rated by the teams developing the recommendations as part of the incident review, and as rated by the auditors

participating in this study (see Figure 1).

Comparison of the ratings between the two groups shows that in both time periods, the incident review teams assessed recommendations as being stronger than those of auditors. Before the implementation of GC-CIRF, review teams considered 58.7% of recommendations to be of weak strength (compared to 73.2% according to auditors' rating), and after GC-CIRF, teams assessed 16.7% of recommendation as strong (which was double the percentage of recommendations rated as strong by the auditors); however, these differences were not statistically significant. The implementation of GC-CIRF has had a significant impact on improving the strength of recommendations, when assessed by both the review teams ($\chi^2(2) = 7.976$, $p = .019$) or study auditors ($\chi^2(2) = 6.644$, $p = .036$). It is worth noting, however, that despite these improvements, the majority of recommendations made after November 2018 (61.3%) continues to be rated as weak by the auditors, with a very low percentages considered to be strong (8.0%).
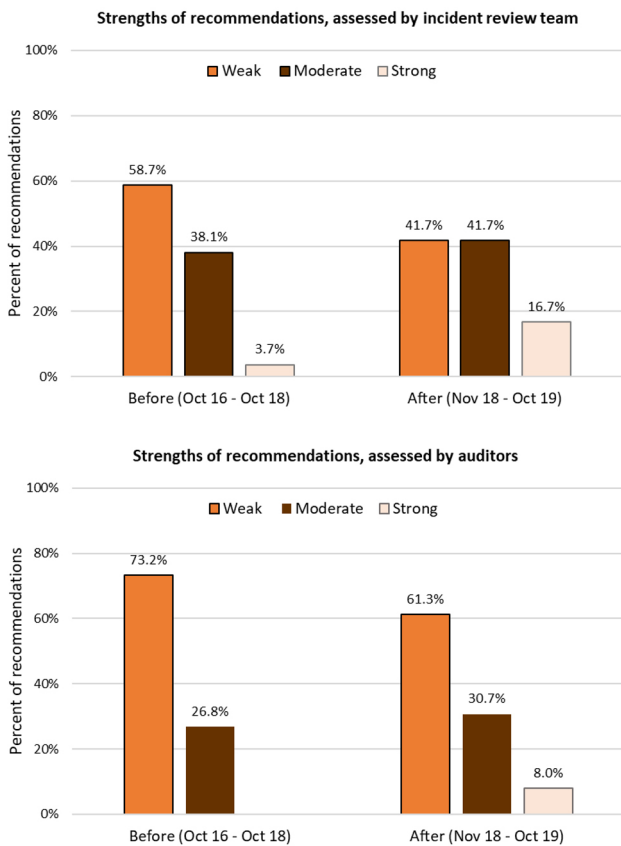
4. DISCUSSION

Results demonstrated improved just culture and second victim experiences, performance of reviews of a much larger range of incidents and near misses, a deeper understanding of what is going well (in line with Safety II), improved stakeholder engagement (in line with RJC), and an increase in number, strength and quality of recommendations. This occurred in the context of a move away from RCAs and greater involvement of the treating team, and following the introduction of a staff peer responder program, "Always There".[28] This aligns with findings and recommendations from a recent review of the personal and professional impacts of loss through suicide.[42]

There were, to our knowledge, no other policy changes, adoptions or cultural shifts that may have occurred and could account for the effects we have observed.

The staff survey currently used at GCMHSS comes from traditional Just Culture principles rather than RJC.[34] This calls for an updated survey, which should also better capture second victim experiences and support.[35]

Notwithstanding significantly improved quality and strength of recommendations after the implementation of GC-CIRF, few were classified as "strong". Yet there were substantial changes away from modifying procedures and rolling out education, and towards more resilient responses such as enhancing team coordination, engaging with families, and simulation exercises to understand work as done.[43] While these may not be deemed "strong" within a hierarchy of controls framework, they can be much more desirable given our

complex systems. Combinations of several weaker recommendations may also be beneficial but could not be identified through from the individual ratings of the present study.

The "learn anything" principle aligned with feedback from families about the review process. Families frequently raise issues about care and engagement, or suggest improvements to the system that may appear unrelated,[4] but can address issues including demand and capacity misalignments which could have proactively reduced risk rather than only responding once harm had occurred.

The audit tool, although adapted from Leistikow et al.'s[33] original format, still proved limited in its consideration of Resilient Health Care (RHC) or Safety II principles. Yet, it was a useful quality improvement tool in identifying gaps in performance, such as the recognition for the need for open disclosure following non-SAC1 reviews. Additional specific Safety II and RJC approaches should be further embedded into GC-CIRF review processes, such as those previously noted by Anderson and others.[4,43] This literature identifies issues such as increasing staff awareness of the concepts of Safety II and RJC; remaining open to a range of possible learnings and actions; improving understanding of the misalignments between demand and capacity and work as done, and trade-offs and adaptations, including what is working well and what might be adding risk; supporting actions that will enhance team work, coordination, and diversity of opinions; and considering whether findings are applicable to other areas of the organization.

The process audit tool applied for the purposes of this evaluation, is used as part of routine quality improvement typically completed by only one rater. We acknowledge this to be a limitation, which was partly mitigated by the fact that the same person completed all process audits included in our study and they were an experienced clinician. Also, the process audit tool allowed for a measurement of the presence of processes felt to be important in implementing this new approach to responding to incidents, however it does not give us a comparison with processes that were occurring prior to the implementation. While this would have added further valuable information, performing those audits on past reviews was outside of the scope and resources of this evaluation.

As described, there are limitations to the effective measurement of quality and strength of recommendations, with some differences in their description in the literature. A more standardised approach was achieved through the use of brief descriptors for the domains and sub-domains of quality, and a process of development of inter-coder reliability for the auditors.

Further limitation of our study is the absence of a measure of perceptions of GC-CIRF processes by families and carers. While anecdotal feedback has suggested that this process was well received, it is important for any future studies in this area to systematically collate and evaluate experiences of all stakeholders.

5. CONCLUSIONS

Bringing about cultural change including a Just Culture is recognised to be very challenging.[44] While this paper describes an evaluation of the impacts of implementing a range of components of this framework, with demonstrated improvements in culture and other measures, it gives little insight into any critical success factors in terms of the implementation processes or leadership actions that supported these changes. There is of course no substitute for continued advocacy towards all levels of leadership, providing support and endorsement for approaches to incidents that incorporate Safety II and restorative just culture approaches.

CONFLICTS OF INTEREST DISCLOSURE
The authors declare they have no conflicts of interest.

REFERENCES

[1] Braithwaite J, Wears RL, Hollnagel E. Resilient health care: turning patient safety on its head. International Journal for Quality in Health Care. 2015; 27(5): 418-420. PMid: 26294709. https://doi.org/10.1093/intqhc/mzv063

[2] Frankel AS, Leonard MW, Denham CR. Fair and just culture, team behavior, and leadership engagement: The tools to achieve high reliability. Health Services Research. 2006; 41(4p2): 1690-1709. PMid: 16898986. https://doi.org/10.1111/j.1475-6773.2006.00572.x

[3] Khatri N, Brown GD, Hicks LL. From a blame culture to a just culture in health care. Health Care Management Review. 2009; 34(4): 312-322. PMid: 19858916. https://doi.org/10.1097/HMR.0b013e3181a3b709

[4] Anderson JE, Watt AJ. Using Safety-II and resilient healthcare principles to learn from Never Events. International Journal for Quality in Health Care. 2020; 32(3): 196-203. PMid: 32175571. https://doi.org/10.1093/intqhc/mzaa009

[5] Hibbert PD, Thomas MJW, Deakin A, et al. Are root cause analyses recommendations effective and sustainable? An observational study. International Journal for Quality in Health Care. 2018; 30(2): 124-131. PMid: 29346587. https://doi.org/10.1093/intqhc/mzx181

[6] Hollnagel E. Safety-I and safety-II: the past and future of safety management. CRC press; 2018. https://doi.org/10.1201/978131

5607511

[7] Dekker SW, Hugh TB. Balancing "no blame" with accountability in patient safety. N Engl J Med. 2010; 362(3): 275; author reply 275-6. PMid: 20089985. https://doi.org/10.1056/NEJMc0910312

[8] Hirschhorn L. Reworking authority: Leading and following in the post-modern organization. Mit Press; 1998.

[9] Marx D. Patient Safety and the "Just Culture": A Primer for Health Care Executives. Columbia University Columbia University, New York City; 2001.

[10] Reason JT. Managing the risks of organizational accidents. Aldershot, Hants, England: Ashgate; 1997.

[11] Vine R, Mulder C. After an inpatient suicide: the aim and outcome of review mechanisms. Australas Psychiatry. 2013; 21(4): 359-364. PMid: 23630398. https://doi.org/10.1177/1039856213486306

[12] Wachter RM, Pronovost PJ. Balancing "no blame" with accountability in patient safety. N Engl J Med. 2009; 361(14): 1401-6. PMid: 19797289. https://doi.org/10.1056/NEJMsb0903885

[13] Wailling J, Kooijman A, Hughes J, et al. Humanizing harm: Using a restorative approach to heal and learn from adverse events. Health Expectations. 2022. PMid: 35322513. https://doi.org/10.1111/hex.13478

[14] Toffolutti V, Stuckler D. A Culture Of Openness Is Associated With Lower Mortality Rates Among 137 English National Health Service Acute Trusts. Health Affairs. 2019; 38(5): 844-850.

[15] Cook R, Rasmussen J. "Going solid": a model of system dynamics and consequences for patient safety. Qual Saf Health Care. 2005; 14(2): 130-134.

[16] Hollnagel E. The ETTO principle: efficiency-thoroughness trade-off: why things that go right sometimes go wrong. Burlington, VT, Farnham, England: Ashgate; 2009.

[17] Hollnagel E, Woods DD, Leveson NG. Resilience Engineering Concepts and Precepts. Aldershot: Ashgate Publishing Ltd.; 2006.

[18] Sharpe VA. Accountability and Justice in Patient Safety Reform. Washington: Georgetown University Press; 2004.

[19] Dekker SWA, Breakey H. "Just culture": Improving safety by achieving substantive, procedural and restorative justice. Safety Science. 2016; 85: 187-193. https://doi.org/10.1016/j.ssci.2016.01.018

[20] Dekker S. Just culture : restoring trust and accountability in your organization. Third edition. ProQuest. Boca Raton: CRC Press, Taylor & Francis Group; 2017.

[21] Hollnagel E. Safety-II in practice: developing the resilience potentials, ed. ProQuest. New York, NY: Routledge; 2017. https://doi.org/10.4324/9781315201023

[22] Turner K, Stapelberg NJC, Sveticic J, et al. Inconvenient truths in suicide prevention: Why a Restorative Just Culture should be implemented alongside a Zero Suicide Framework. Australian & New Zealand Journal of Psychiatry. 2020; 54(6): 571-581. PMid: 32383403. https://doi.org/10.1177/0004867420918659

[23] Turner K, Sveticic J, Almeida-Crasto A, et al. Implementing a systems approach to suicide prevention in a mental health service using the Zero Suicide Framework. Australian & New Zealand Journal of Psychiatry. 2021; 55(3): 241-253. PMid: 33198477. https://doi.org/10.1177/0004867420971698

[24] Macrae C. The problem with incident reporting. BMJ Qual Saf. 2016; 25(2): 71-75. PMid: 26347519. https://doi.org/10.1136/bmjqs-2015-004732

[25] Sujan MA, Huang H, Braithwaite J. Learning from incidents in health care: Critique from a Safety-II perspective. Safety Science. 2017; 99: 115-121. https://doi.org/10.1016/j.ssci.2016.08.005

[26] Centers for Disease Control and Prevention. Hierarchy of Controls. 2022. Available from: https://www.cdc.gov/niosh/topics/hierarchy/default.html

[27] State of Queensland. STARS Tool for Clinician Disclosure. Patient Safety Queensland. 2011.

[28] Morris D, Sveticic J, Grice D, et al. Collaborative Approach to Supporting Staff in a Mental Healthcare Setting: "Always There" Peer Support Program. Issues in Mental Health Nursing. 2022; 43(1): 42-50. PMid: 34403302. https://doi.org/10.1080/01612840.2021.1953651

[29] Scott SD, Hirschinger LE, Cox KR, et al. Caring for our own: deploying a systemwide second victim rapid response team. Joint Commission Journal on Quality and Patient Safety. 2010; 36(5): 233-240. https://doi.org/10.1016/S1553-7250(10)36038-7

[30] Denham CR. TRUST: The 5 Rights of the Second Victim. Journal of Patient Safety. 2007; 3(2): 107-119. https://doi.org/10.1097/01.jps.0000236917.02321.fd

[31] Halifax J. G.R.A.C.E. for nurses: Cultivating compassion in nurse/patient interactions. Journal of Nursing Education and Practice. 2013; 4. https://doi.org/10.5430/jnep.v4n1p121

[32] Incident Analysis Collaborating Parties, Canadian Incident Analysis Framework. Edmonton, AB; 2012.

[33] Leistikow I, Mulder S, Vesseur J, et al. Learning from incidents in healthcare: the journey, not the arrival, matters. BMJ Quality & Safety. 2017; 26(3): 252-256. PMid: 27037302. https://doi.org/10.1136/bmjqs-2015-004853

[34] Petschonek S, Burlison J, Cross C, et al. Development of the Just Culture Assessment Tool (JCAT): Measuring the perceptions of healthcare professionals in hospitals. Journal of Patient Safety. 2013; 9(4): 190. PMid: 24263549. https://doi.org/10.1097/PTS.0b013e31828fff34

[35] Burlison JD, Scott SD, Browne EK, et al. The second victim experience and support tool (SVEST): validation of an organizational resource for assessing second victim effects and the quality of support resources. Journal of Patient Safety. 2017; 13(2): 93. PMid: 25162208. https://doi.org/10.1097/PTS.0000000000000129

[36] Gold Coast Mental Health and Specialist Services, Voice of the staff: Suicide prevention strategy survey. Southport, Australia; 2020.

[37] Andrews JC, Schünemann HJ, Oxman AD, et al. GRADE guidelines: 15. Going from evidence to recommendation-determinants of a recommendation's direction and strength. Journal of Clinical Epidemiology. 2013; 66(7): 726-735. PMid: 23570745. https://doi.org/10.1016/j.jclinepi.2013.02.003

[38] Brandrud AS, Haldorsen GSH, Nyen B, et al. Development and validation of the CPO scale, a new instrument for evaluation of health care improvement efforts. Quality Management in Health Care. 2015; 24(3): 109-120. PMid: 26115058. https://doi.org/10.1097/QMH.0000000000000065

[39] de Dianous V, Fiévez C. ARAMIS project: A more explicit demonstration of risk control through the use of bow-tie diagrams and the evaluation of safety barrier performance. J Hazard Mater. 2006; 130(3): 220-233. PMid: 16107301. https://doi.org/10.1016/j.jhazmat.2005.07.010

[40] Hettinger AZ, Fairbanks RJ, Hegde S, et al. An evidence-based toolkit for the development of effective and sustainable root cause analysis system safety solutions. Journal of Healthcare Risk Management. 2013; 33(2): 11-20. PMid: 24078204. https://doi.org/10.1002/jhrm.21122

[41] State of Queensland, Best Practice Guide to Clinical Incident Management, Queensland Government Department of Health, Editor.

Patient Safety and Quality Improvement Service,: Fortitude Valley Queensland; 2014.

[42] Sandford DM, Kirtley OJ, Thwaites R, et al. The impact on mental health practitioners of the death of a patient by suicide: A systematic review. Clinical Psychology & Psychotherapy. 2021; 28(2): 261-294. PMid: 32914489. `https://doi.org/10.1002/cpp.2515`

[43] Anderson JE, Lavelle M, Reedy G. Understanding adaptive team-work in health care: Progress and future directions. Journal of Health Services Research & Policy. 2021; 26(3): 208-214. PMid: 33327787. `https://doi.org/10.1177/1355819620978436`

[44] Edwards MT. An Assessment of the Impact of Just Culture on Quality and Safety in US Hospitals. Am J Med Qual. 2018; 33(5): 502-508. PMid: 29658295. `https://doi.org/10.1177/1062860618768057`