

Multi-Incident Analysis of Paediatric SAC1 Clinical Incident Reports 2020-2023

Prepared by the Clinical Incident Subcommittee,
Queensland Paediatric Quality Council (QPQC)
October 2026

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The Queensland Paediatric Quality Council (QPQC) sincerely acknowledges the children, families and carers who have experienced an unexpected clinical incident during healthcare that has resulted in harm or the loss of a child. We recognise the profound distress and grief these events cause, and we are committed to learning from reviews of these incidents to help improve care for all Queensland children.

We also acknowledge the impact that these unexpected outcomes have on healthcare workers, who are committed to providing the best possible care and who are themselves affected when such events occur. We recognise the significant time and effort that goes into undertaking reviews of these incidents and the commitment of our staff to improving outcomes for Queensland children.

The QPQC gratefully acknowledges the contribution of our volunteer Clinical Incident Subcommittee (CISC) (see Appendix A) for their invaluable time, knowledge, and assistance in completing these reviews. We also wish to acknowledge the valuable contribution of current and past members over the 10 years in which CISC has been in operation. This report represents the final statewide multi-incident analysis undertaken by the Clinical Incident Subcommittee, as the QPQC transitions its focus to explore broader paediatric priority areas.

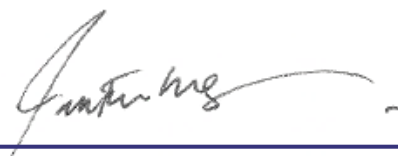
We would also like to acknowledge Patient Safety and Quality (PSQ), Clinical Excellence Queensland; Queensland Health Hospital and Health Services (HHSs); and the Coroner's Court of Queensland for providing documentation in support of this work.

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This report has been prepared by Jodie Osborne (Principal Project Officer, CISC), Dr Clare Thomas (Chair, QPQC; Co-Chair, CISC), Dr Ianthe Mills (Deputy Chair, QPQC), Dr Ben Lawton (Co-Chair, CISC) and CISC members.



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Executive Summary

This report presents findings from a statewide multi-incident analysis of 70 serious adverse clinical incident (SAC1) events involving children in Queensland between 2020 and 2023. These incidents represent rare but high consequence events, including death (29%) and likely permanent harm (71%), and provide critical insights into system-level risks and opportunities to strengthen paediatric patient safety and care.

Key Findings

The Clinical Incident Subcommittee (CISC) review of these 70 SAC1 paediatric clinical incidents identified system level opportunities for improving patient safety and care across the care pathway.

Failure to recognise and respond to deterioration remains a critical risk. Issues with how the Children's Early Warning Tool is being used were identified in a cluster of clinical incidents, particularly in Emergency Departments. These included incomplete or incorrect scoring and inadequate escalation of care, indicating that early warning systems are not always being reliably operationalised in practice.

Diagnostic error is a major contributor to harm in paediatric adverse events, identified in 71% of the clinical incidents reviewed. This primarily involved delayed diagnoses, often occurring in the context of evolving illness, limited documentation of clinical reasoning and differential diagnoses, and missed opportunities for senior review. These findings highlight a system-wide gap in managing diagnostic uncertainty.

Re-presentations are common in paediatric care, and although serious harm is rare, they represent an important early warning sign in cases where harm occurs. Over one-fifth of incidents involved children re-presenting, most within 48hrs. These cases were associated with diagnostic error and inadequate safety netting and suboptimal discharge processes, including limited or unclear discharge instructions, poor documentation, communication barriers, and families leaving before receiving appropriate advice. These gaps represent a critical failure point in the care continuum for these children.

Infants and young children aged 0-4 years and Aboriginal and Torres Strait Islander children were slightly over-represented in SAC1 incidents when compared to both population estimates and Queensland Health Paediatric Emergency Department presentation data, warranting further investigation and suggesting the need for targeted clinical safeguards in this vulnerable group.

Critical incident review processes demonstrate variability in quality across the State. While improvements in documentation and inclusion of family perspectives were noted, statewide opportunities to strengthen and enhance the effectiveness of recommendations addressing the root causes and contributing factors were identified. Recommendations arising from incident reviews are predominately weaker actions, with most actions focusing on education or policy reinforcements rather than system redesign. This limits the ability to achieve sustained improvements in patient safety.

Implications for the Health System

The findings demonstrate opportunities for system level improvement to patient safety and care across the paediatric clinical care pathway, particularly relating to the:

- ▶ Recognition and escalation of clinical deterioration
- ▶ Diagnostic processes and management of uncertainty
- ▶ Transitions of care, including safe discharge and management of re-presentations
- ▶ The effectiveness of clinical incident review systems

Current approaches to incident review are not consistently translating into strong, system-level recommendations representing missed opportunities for change.

Priority Actions

To address these risks, a coordinated statewide approach is required, focusing on:

1. Strengthening the implementation and reliability of the Children's Early Warning Tool, particularly in Emergency Departments
2. Developing system-wide strategies to support diagnostic reasoning and management of diagnostic uncertainty
3. Implementing standardised, high-quality discharge and safety netting processes
4. Introducing structured approaches to managing re-presentations, including expected or mandated senior clinician review
5. Enhancing the quality and consistency of clinical incident reviews, with a focus on generating strong, system-focused recommendations.

Consideration should be given in the implementation of these recommendations to improving safety and equity for vulnerable populations, particularly infants and young children 0-4 years of age and Aboriginal and/or Torres Strait Islander children.

Conclusion

This report highlights that while serious paediatric clinical incidents are rare, they are characterised by predictable and preventable system issues. Addressing these issues requires a shift from localised, education-based responses to coordinated, system-level interventions that strengthen clinical processes, improve decision-making and ensure consistent high-quality care for all children across Queensland.

1. Background

Queensland Health (QH) is committed to delivering healthcare that is safe, high-quality and responsive to the needs of children and their families. Whilst most children experience positive outcomes, unexpected clinical incidents can occur that result in, or have the potential to result in, unintended harm. These events, while rare, can have a significant impact on the children, families and healthcare staff involved.

Within QH, clinical incidents are classified using a severity assessment code (SAC).⁽¹⁾ The most serious incidents, those resulting in death or likely permanent harm, are classified as SAC1 events. When a SAC1 incident occurs, the local Hospital and Health Service (HHS) undertakes a formal review, such as a Root Cause Analysis (RCA) or Human Error and Patient Safety Review (HEAPS), to identify contributing factors and recommend actions to prevent recurrence at the local level.

The Queensland Paediatric Quality Council (QPQC), established under the *Hospital and Health Boards Act, 2011*, has responsibility for identifying factors that contribute to Queensland's paediatric mortality and morbidity. As part of its mandate, the QPQC established a Clinical Incident Subcommittee (CISC) to undertake statewide, retrospective, multi-incident reviews of paediatric SAC1 clinical incident reports. The purpose was not to reinvestigate individual events, but to identify common themes, contributing factors and system-level opportunities for improvement in patient safety and care.

This report presents findings from the CISC's review of SAC1 clinical incident reports involving children and young people under 18 years of age in Queensland from 2020 to 2023. It profiles clinical incidents by facility, patient and incident factors; describes statewide themes and identifies system-wide opportunities for enhancing the quality of clinical incident reports reviewed. The findings build on previous CISC reviews of paediatric SAC1 clinical incident reports that occurred between 2012-2014 and 2015 -2019.^(2,3)

2. Methodology

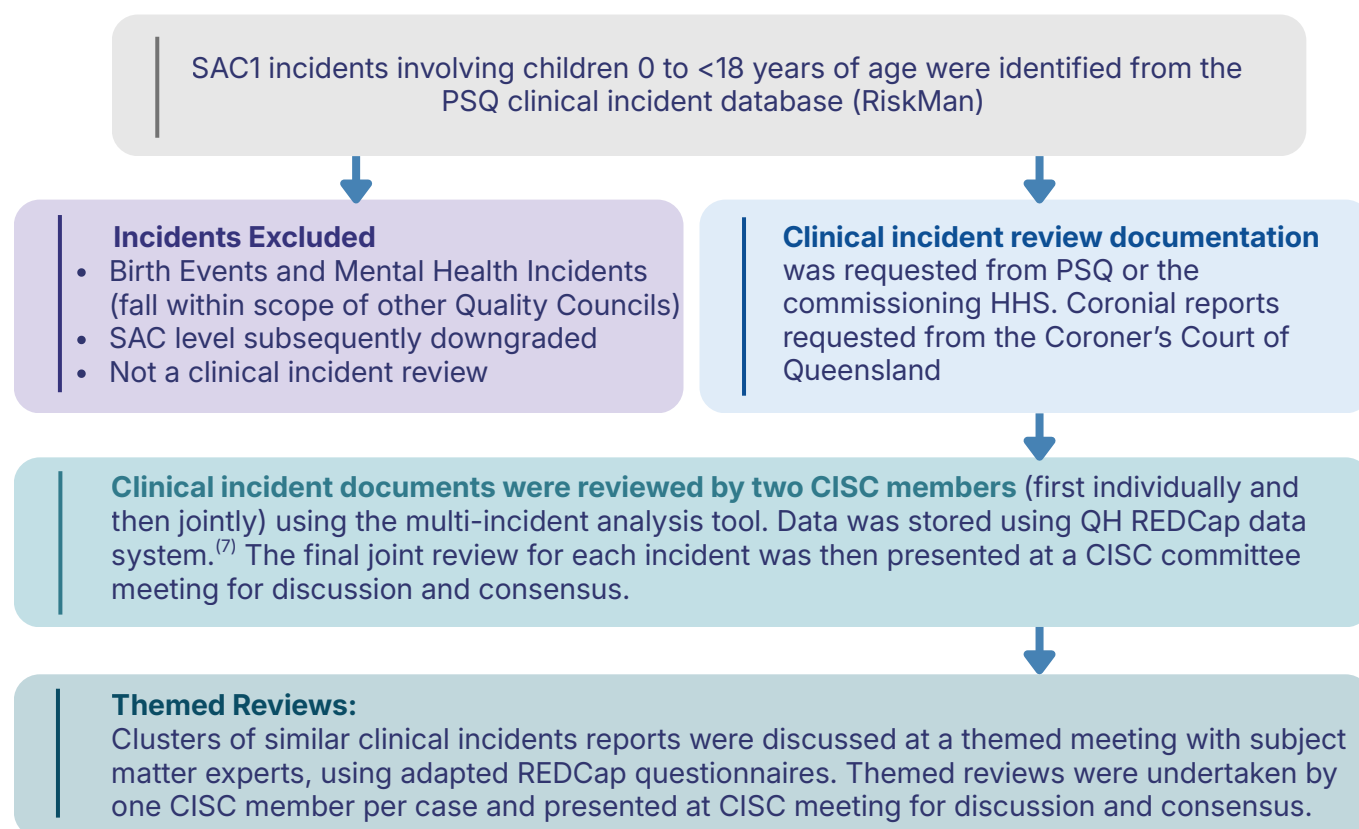
Childrens Health Queensland's Health Research Ethics Committee approved this work as a quality assurance activity in March 2020 and February 2022.

Reviews were undertaken by an expert advisory committee (CISC), with statewide membership and expertise in paediatrics, paediatric specialties, emergency medicine, nursing, surgery, general practice, retrieval, patient safety, and human and system factors. A list of members is provided in Appendix A.

The QPQC developed a multi-incident analysis tool to summarise key information related to adverse events, including demographic, patient and facility characteristics, incident types, and associated human and system factors. The tool also captures quality indicators for clinical incident reviews and assesses the strength of recommendations made. The tool has been progressively refined over ten years, after being originally adapted from unpublished resources produced by the New South Wales Clinical Excellence Commission's 'Clinical Management – Children and Young Person RCA Review Committee Taxonomy Dictionary',⁽⁴⁾ QH Patient Safety and Quality team (PSQ), as well as the United States Department of Veterans Affairs National Centre of Patient Safety Recommended Hierarchy of Actions tool.⁽⁵⁾

Consistent with Queensland Health guidance, aggregated incident data in this report are used primarily to identify recurring themes and potential system-level opportunities for further investigation and improvement. Clinical incident reporting data should not be interpreted as a measure of incidence or rate of patient harm, or as an indicator of comparative safety performance between service or populations.⁽⁶⁾ Incident reporting is influenced by multiple factors, including reporting practices, patient populations, service activity and clinical context.

A summary of the review process is provided below.



3. Profile of SAC1 Clinical Incidents in Children 2020-2023

A total of 176 SAC1 clinical incidents in children (0 to <18 years) were identified from the RISKMan database from January 2020 to December 2023. Of these, 105 were not included in this review as they fell within the scope of other quality assurance councils (mental health and birth events), had subsequent SAC level downgrades, or were not a standard clinical incident review investigation. The remaining 71 clinical incident reports were reviewed by CISC. Two reports related to the same incident, having been reviewed separately by two HHSs. As a result, 70 clinical incidents and 71 clinical incident reports were included in the review.

The number of paediatric SAC1 clinical incidents varied over time, ranging from 14 to 22 incidents per year (median 17) (Figure 1). Previous CISC reviews of 2012-2014 and 2015-2019 identified annual counts ranging from 9 to 23 incidents per year (median 15.5). These descriptive comparisons reflect reported SAC 1 incidents within scope of each review and should not be interpreted as changes or stability in the underlying rate of harm.

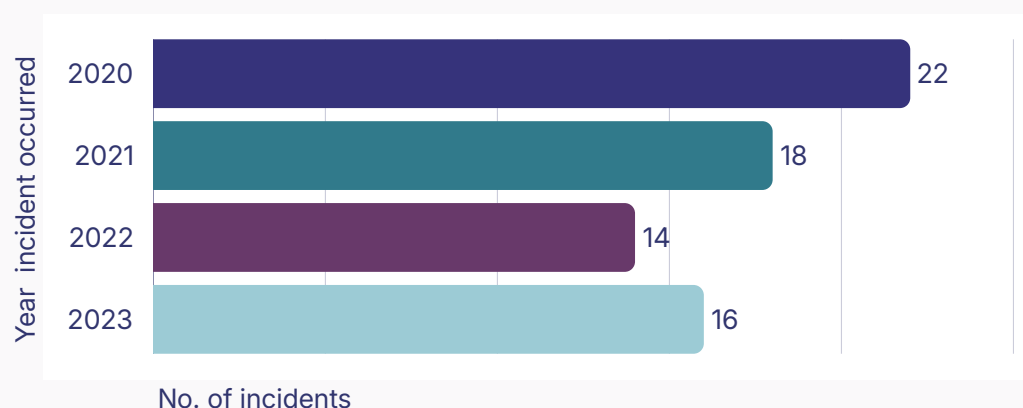


Figure 1: Number of statewide paediatric SAC1 clinical incidents per year (within scope of QPQC review (n=70))

3.1 Facility Profile (n=71)

Incident counts varied across the 16 Queensland Health HHS's (Figure 2). Four HHSs had no incidents included in the review, seven reported between one and five incidents, three had 6-10 incidents and two had more than 10 incidents. These counts should not be interpreted as measures of comparative safety performance, as they may be influenced by factors including population size, service activity and complexity, case mix and reporting practices.

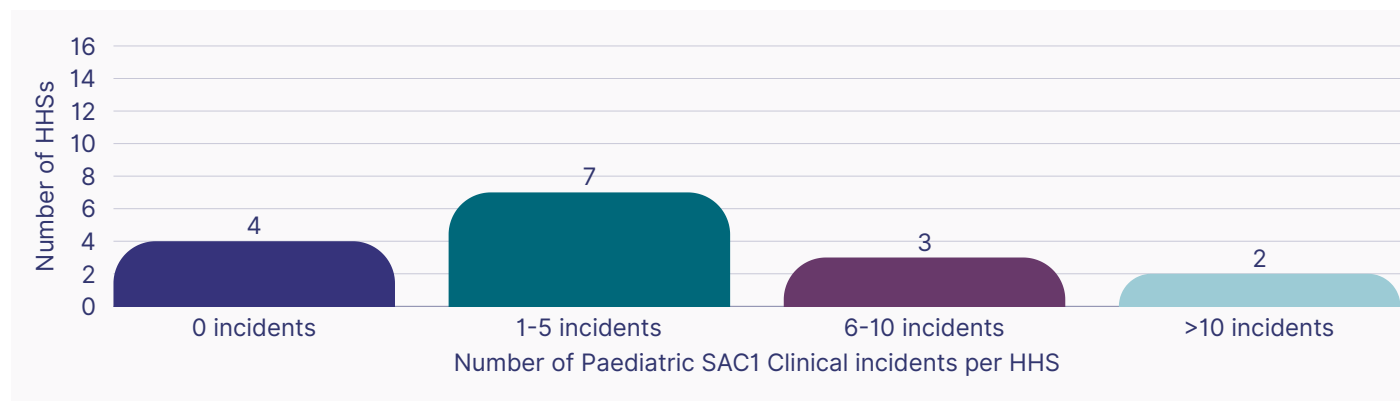


Figure 2: Distribution of paediatric SAC1 clinical incidents across Queensland Health HHSs

Figure 3 compares the distribution of clinical incidents (by service location) with the distribution of both Queensland's 2020 child population (aged 0-<18 years)⁽⁸⁾ and 2020-2023 Queensland Health Paediatric Emergency Department presentations (by facility),⁽⁹⁾ using the Accessibility and Remoteness Index of Australia (ARIA).⁽¹⁰⁾ These descriptive comparisons demonstrate differences in the distribution of reported SAC 1 incidents; however, they cannot be used to infer differences in the underlying rate of harm or safety between geographic areas.

Services located in Major Cities accounted for 72% of the paediatric SAC1 clinical incidents reviewed by CISC (n=50). In comparison, 57% of paediatric Emergency Department presentations and 63% of Queensland's paediatric population were located in these areas.

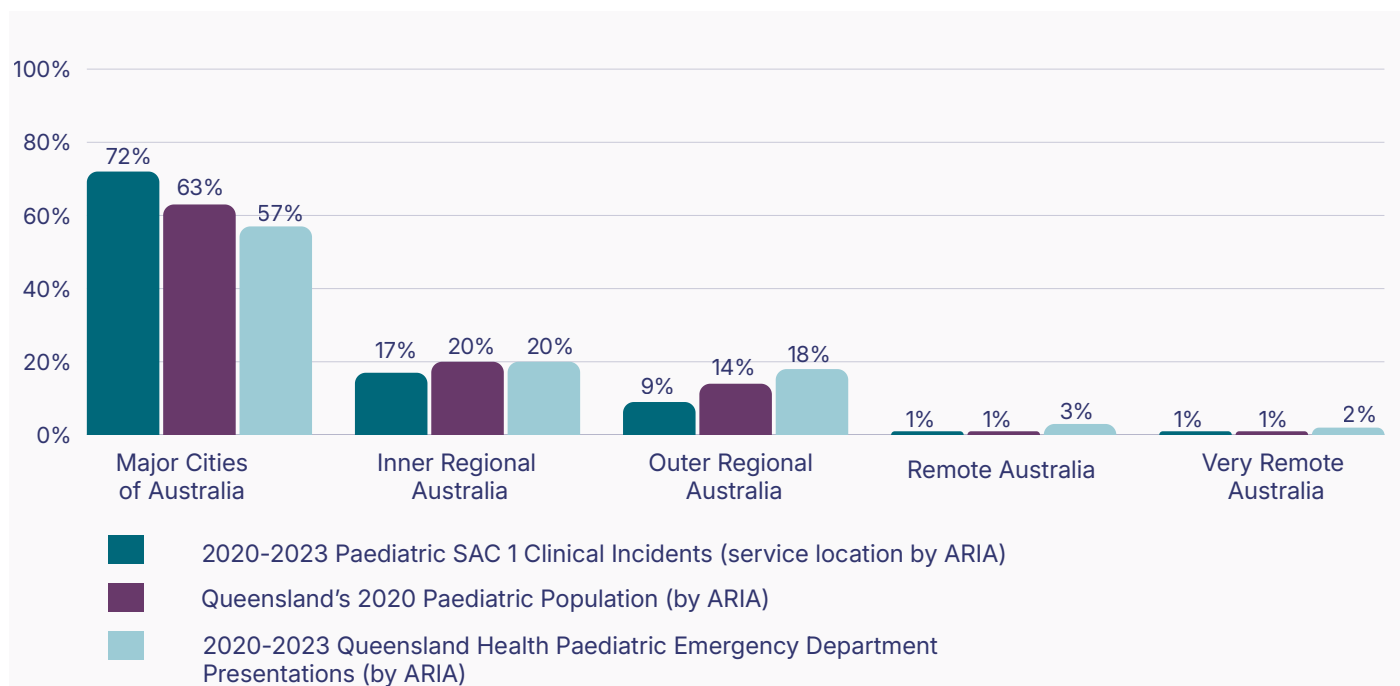


Figure 3: Comparison of the spread of paediatric SAC1 clinical incidents (by service location) against Queensland's 2020 child population estimates (age 0-17 years)⁽⁸⁾ and Queensland Health paediatric Emergency Department presentations⁽⁹⁾ by remoteness of residence (using ARIA classifications).

This pattern differs from earlier reviews of paediatric SAC1 clinical incidents (2012-2014 and 2015-2019), which found a greater proportion of incidents in Outer Regional, Remote and Very Remote areas relative to their share of Queensland’s child population.^(2,3) Changes in reporting patterns across locations have been observed, with increases in some areas and decreases in others. Further investigation is needed to better understand the factors influencing variation, including service context, reporting practices, and system conditions.

The Clinical Services Capability Framework (CSCF) outlines clinical and support services which hospitals can provide, ranging from Level 1 (low complex ambulatory care services) to Level 6 (high complex inpatient and ambulatory care services).⁽¹¹⁾ Eighty five percent of clinical incidents occurred in a health facility with a CSCF level (Children’s Medical Services) ≥ 4 (see Figure 4). Of these, the highest percentage of incidents occurred in services with a CSCF level = 4 (41%, n=29) which are services that provide moderate, complex inpatient and ambulatory care services.



Figure 4: Queensland Health Paediatric SAC1 Clinical Incidents by Clinical Service Capability Framework level (Childrens Medical Services) ⁽¹¹⁾

At a facility level, rural and remote services were identified using a combination of the Modified Monash Model (MMM) ⁽¹²⁾ categories 4-7 (medium rural towns, small rural towns, remote communities and very remote communities) and the Queensland Health Rural and Remote Health Facility Classification Framework.⁽¹³⁾ While ARIA was used previously to describe the remoteness of service locations, MMM was used to classify whether a healthcare facility was considered a rural or remote service. This is because it incorporates both geographical remoteness and community size, providing a more relevant measure of the healthcare service delivery context. Only five paediatric SAC1 clinical incidents (7%) were reported in rural and remote facilities, with these services classified as either District or Community Hospitals.

3.2 Patient Profile (n=70)

Patient outcomes included likely permanent harm in 50 incidents (71%) and loss of life in 20 incidents (29%).

Children aged 0-4 years were involved in just over half of the paediatric SAC1 clinical incidents reviewed, accounting for 36 of the 70 incidents (51%). In comparison, children aged 0-4 years represented 41% of Queensland Health Paediatric Emergency Department presentations and 25% of Queensland’s paediatric population during this time (see Figure 5). Children aged less than 1 year accounted for over half of the incidents in the 0-4-year age group (19 of 36 incidents), followed by children aged 1-2 years who were involved in 12 incidents.

51%
involved
children
0-4 years
of age

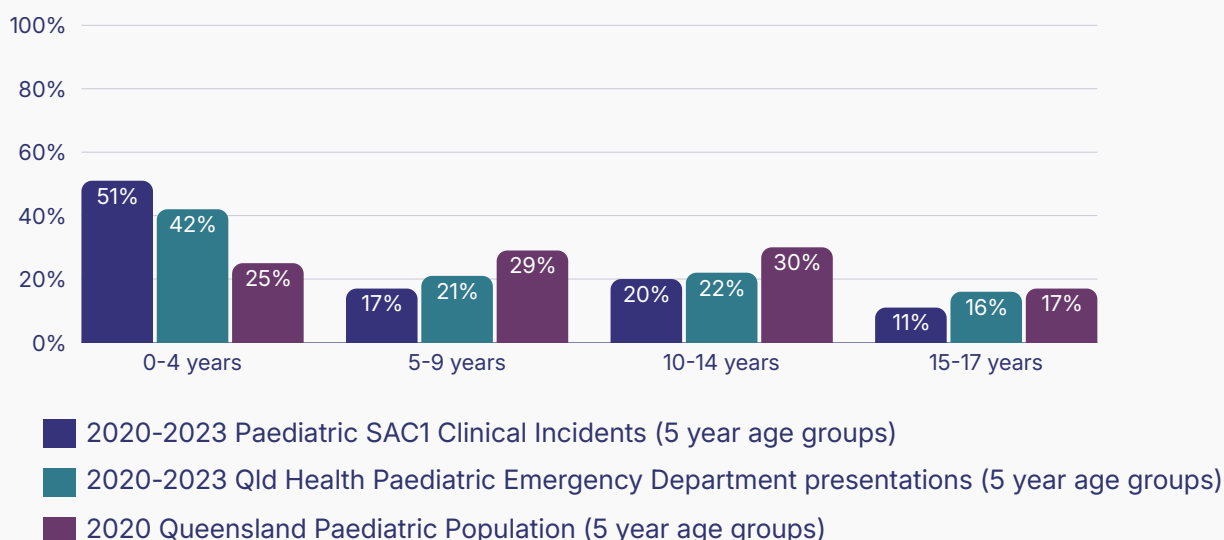


Figure 5: Percentage of children involved in 2020-2023 SAC1 paediatric clinical incidents vs 2020-2023 Paediatric Emergency Department presentations ⁽⁹⁾ vs 2020 Qld Paediatric Population Estimates (0-17 years) by 5-year age groups. ⁽⁸⁾

The higher proportion of children 0-4 years of age in paediatric SAC1 clinical incidents is consistent with findings from our previous CISC reviews, with children in this age group accounting for 63% of 2015-2019 and 47% of 2012-2014 incidents. ^(2,3)

Twenty percent of clinical incidents involved children who identified as being of Aboriginal and/or Torres Strait Islander background (n=14), with First Nations status not recorded in 6 incidents. In comparison, Aboriginal and/or Torres Strait Islander children accounted for 14% of Queensland Health Paediatric Emergency Department presentations (2020-2023) ⁽⁹⁾ and 8% of Queensland's paediatric population (2020). ⁽¹⁴⁾

The higher proportion of Aboriginal and/or Torres Strait Islander children involved in paediatric SAC1 clinical incidents is consistent with findings from previous CISC reviews, with Aboriginal and/or Torres Strait Islander children accounting for 25% of 2015-2019 incidents and 14% of 2012-2014 incidents. ^(2,3)

20%
of clinical
incidents
involved
Aboriginal
and/or Torres
Strait Islander
children

The repeated observation across CISC reviews warrants further investigation from a health equity perspective.

3.3 Incident Profile (n=70)

Clinical incidents were profiled across a range of healthcare factors that were identified as a contributing factor within the clinical incident reviews (see Figure 6). The most frequently reported healthcare factor was diagnostic error which was identified in 71% (n=50) of the clinical incidents reviewed (primarily delays in diagnosis, n=42).

Diagnostic errors occurred in the context of a range of healthcare factors including issues during management/treatment, delayed recognition and response to deterioration, issues with assessment and escalation delays/failures.

Diagnostic errors: "missed opportunities to make a correct or timely diagnosis based on available evidence, regardless of patient harm." ⁽¹⁵⁾

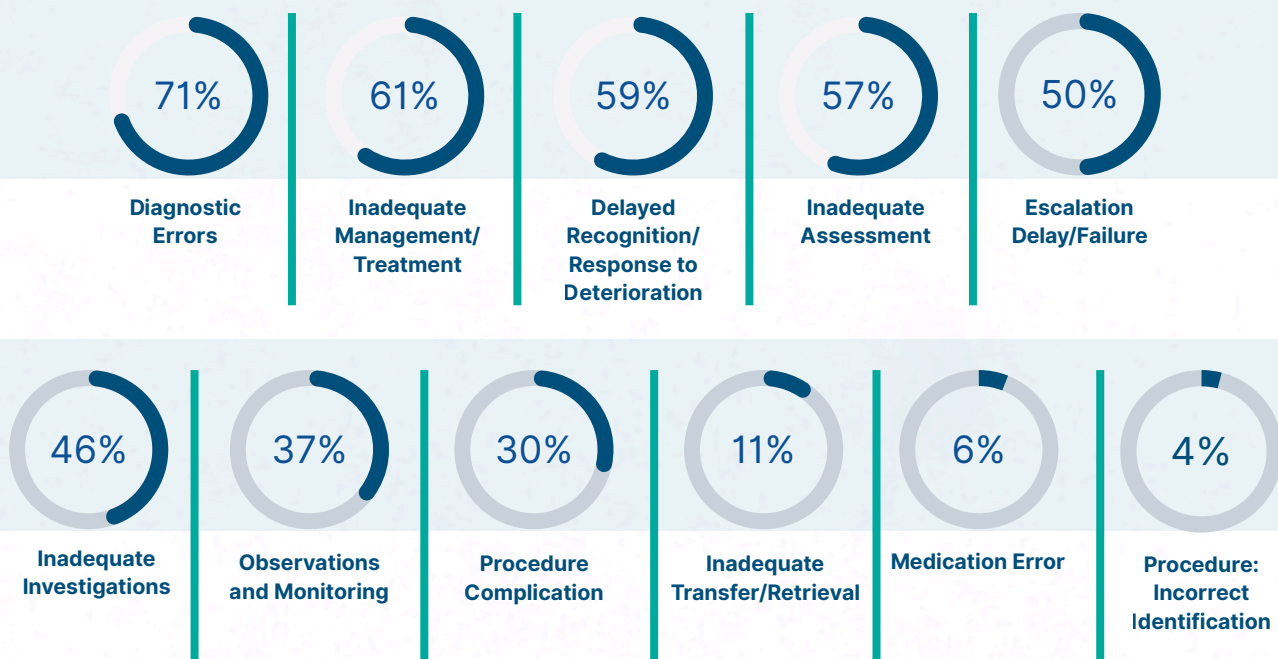


Figure 6: Percentage of Paediatric SAC1 Clinical Incident Review Reports in which the Healthcare Factor was identified as contributing (n=70).

3.4 Facility, Patient and Incident Profile Summary

Young infants and children 0 - 4 yrs, and Aboriginal and/or Torres Strait Islander children, comprised a higher proportion of the SAC1 incidents reviewed than their respective proportions of paediatric Emergency Department presentations and the Queensland population. Similar patterns have been observed in previous CISC reviews. As clinical incident reporting data cannot be used to determine population rates of harm, these findings should be considered a signal warranting further investigation rather than evidence of increased risk. Whilst it is important to recognise that serious clinical incidents are rare events, the findings suggest the need for targeted clinical safeguards in this vulnerable group, particularly in assessment, monitoring, safety netting and local processes for escalation for senior review.

Fluctuations in the location of clinical incidents over time have been identified, with slightly higher-than-expected numbers of clinical incidents reported in Major Cities compared to population estimates and paediatric emergency presentations data. This represents a shift from 2014-2019 clinical incidents, which previously demonstrated higher than expected levels in Outer Regional, Rural and Remote locations. Whilst these findings cannot be used to infer differences in the underlying rate of harm or safety between geographic areas, changes in the geographic distribution of reported incidents should continue to be monitored and, where persistent, explored through qualitative review and other data sources.

Diagnostic error is a major contributor to harm in paediatric adverse events, identified in 71% of the clinical incidents reviewed. This primarily involved delayed diagnoses, often occurring in the context of evolving illness; issues during management, treatment and assessment; and missed opportunities for senior review. These findings highlight a system-wide need for greater support for clinicians in managing diagnostic uncertainty.

4 Statewide Themes

Since the release of our last report in 2023, the CISC committee have completed two additional statewide themed reviews focusing on the Children's Early Warning Tool and re-presentations.

4.1 Children's Early Warning Tool (CEWT)

The Children's Early Warning Tool (CEWT) is used across Qld Health to recognise and respond to deterioration in hospitalised children.⁽¹⁶⁾ The tool allows healthcare workers to record and score vital signs/clinical observations and determine the appropriate level of response based on this score. CISC identified a cluster of 17 paediatric SAC1 clinical incidents between 2017 and June 2022, in which issues were identified with the way in which the CEWT was being used. Characteristics of these incidents included:

- ▶ 94% (n=16) were reported in an ED setting (mixed EDs, small rural health facilities, major hospitals)
- ▶ 76% (n=13) had a sepsis diagnosis
- ▶ 59% (n=10) involved re-presentations
- ▶ 41% (n=7) first presented to rural and remote health facilities

Main Concerns identified

65% reported issues associated with the inadequate calculation/documentation of CEWT (n=11)



Insufficient frequency



CEWT not scored



Vital signs not fully completed when required (absence of BP)

88% indicated that the clinical response to CEWT score was inadequate (n=15)



No/delayed/inadequate escalation



Medical Emergency Team (MET) call not activated

Contributing factors included policy/guideline failures (65%, n=11), workforce issues (53%, n=9), out of hours care (53%, n=9).

4.1.1 CEWT Recommendations and Actions

CISC identified three recommendations to better support the use of CEWT across Queensland Health.

RECOMMENDATION 1

Emergency Departments be a priority for education/ training/resources to support the use of CEWT.

RECOMMENDATION 2

Training and resources should focus on supporting the correct documentation/calculation of CEWT scores and appropriate clinical responses.

RECOMMENDATION 3

Statewide communication or guidelines should be released, including requirement for measuring blood pressure on the CEWT and how to overcome any barriers.

Partnership with Patient Safety and Quality (PSQ), Clinical Excellence Queensland has been central to our change strategy, as they have governance of the CEWT across Qld Health. In August 2024, the QPQC submitted our recommendations to PSQ, who have since undertaken the following activities:

1. The Recognising and Responding to Acute Deterioration Steering Committee (RRAD-SC) endorsed the following changes to the Emergency Department CEWT charts
 - a. The inclusion of the Patient Escalation of Concern for Kids (PECK) Question (a recommendation from the Paediatric Patient Safety Review Project)
 - b. The addition of a prompt within the primary survey to include the risk of battery / magnet ingestion or insertion
 - c. The addition of a primary survey prompt to include immediate medical notification if parents have an unplanned re-presentation of their child to an emergency department

With the release of these enhancements to the Emergency Department Children Early Warning Tools, there has been extensive statewide online education provided about these changes, emphasising the critical importance of calculating CEWT scores and escalating appropriately within the Emergency Department.

2. Work is continuing on the development of a CEWT user guide which will be completed by the end of 2026.
3. Customised support continues to be offered to HHS staff following serious clinical incident reviews where issues with the CEWT use are identified

4.1.2 CEWT Themed Review: Publications

Learnings were shared broadly across Queensland Health through our Paediatric Matters Resource:

Paediatric Matters Edition 12

[Recognising Deterioration: Children's Early Warning Tool \(June 2024\)](#)

Findings were also shared through a poster presentation at the International Forum on Quality and Safety in Health in Canberra, November 2025:

Osborne, J, Thomas, C, and McAuley, S.A. *System-wide Learnings on the Children's Early Warning Tool (CEWT) following a Multi Incident Analysis of Serious Paediatric Clinical Incidents in Queensland (2012-2022)* (Available only on the Queensland Health internal QHEPS site).

Paediatric Matters
A publication by the Queensland Paediatric Quality Council
Edition 12: June 2024

Recognising Deterioration: Children's Early Warning Tool (CEWT)

Patient Story
4-year-old Jon presented to the Emergency Department (ED) with a runny nose, painful right sided limp and no history of trauma. Ibuprofen was given and on review he was running around, with full range of movement. No observations were recorded. Jon was discharged home with GP follow up advised.
Jon re-presented 7.30pm next evening, crying, with a painful right leg, red tympanic membranes and refusing to weight bear. He had delayed capillary refill with cool peripheries. Vital signs were:
8:30pm: Temp 38.7°, HR 170/min, RR 30/min, O2 Sats 94%. Jon's CEWT was incorrectly calculated at 4 instead of 5. He was not screened on the sepsis pathway. Osteomyelitis was considered.
9:00pm: Temp 38.8°, HR 180/min, RR 36/min, Sats 94%, BP 80/50 with a CEWT score of 6 (whilst awaiting specialist review). At 9:30pm, an IV cannula was inserted, and bloods sent. Antibiotics were prescribed but not given until 11:30pm due to workload.
9:00pm - 4:30am - no observations recorded.
4:30am: Temp 39.5°, HR 190/min, RR 36/min, Sats 93%, BP 76/46, with a CEWT of 9. An emergency call was activated resulting in diagnosis and treatment for septic shock and retrieval to a PICU. Jon's blood culture returned positive for *S. aureus*. Femoral osteomyelitis was diagnosed after MRI.

Findings
The QPQC reviewed 17 paediatric SAC1 clinical incidents (2017 - June 22) where issues were reported with the use of CEWT.
Common themes across the 17 cases included:

- 94% reported in an ED setting (including mixed EDs, small rural health facilities, major hospitals)
- 77% child deaths/23% likely permanent harm
- 76% sepsis diagnosis
- 59% re-presentations
- 41% first presented to rural and remote health facilities

Main concerns identified:

- Inadequate calculation/documentation of CEWT (65%)
 - Insufficient frequency, not scored, vital signs not fully completed when required (absence of BP).

Lessons Learnt

1. Absent, incomplete or delayed CEWT scores can lead to missed opportunities to detect deterioration early. Vulnerable times include high activity shifts, after hours care and rostering/skill mix challenges. Always follow the CEWT Escalation and Observation Plan. If concerned escalate for Medical Officer or MET review.
2. Be aware of vulnerable cohorts including children with a CEWT score 2a, those who have re-presented to EDs within a few days, and those with persistent tachycardia or tachypnoea. CEWT scores 3a are not common. A full set of vital signs (including BP) should be completed for these children and a senior review considered as per local guidelines.
3. Parents/caregivers are a vital source of information about their child's health. When completing a CEWT score, consider asking, "Are you worried your child is getting sicker?" If yes, listen to their concerns, review the child and escalate if required.
4. Consider "Could this be sepsis?" in the differential diagnosis for all children with suspected infection using the Sepsis Pathway screening tool. A full set of observations (including BP) should be completed for those that screen for an early set of full observations on the pathway. Provide paediatric sepsis parent information to children presenting to ED with a fever as a safety netting tool.

Questions to Consider
Are you aware of local guidelines for undertaking, documenting, and escalating vital signs using the CEWT?
Do you know how to measure vital signs in children and use the CEWT? If not, where can you go to for help?
When it is busy, how do you prioritise and escalate to ensure

[The full Paediatric Matters editions are available on our QPQC website](#)

4.2 Re-presentations

CISC identified a cluster of 21 paediatric SAC1 clinical incidents (2018-2023) involving unplanned re-presentations to Queensland Health facilities for the same, evolving or related symptoms. Sixteen children re-presented once, with the remaining five children making between 2 to 4 re-presentations. 14 children re-presented within 48 hours of their initial presentation. Final diagnoses included missed/evolving surgical issue (n=9), sepsis/meningitis (n=7) and other (n=5). The reasons for re-presentation are provided in Figure 7 below.

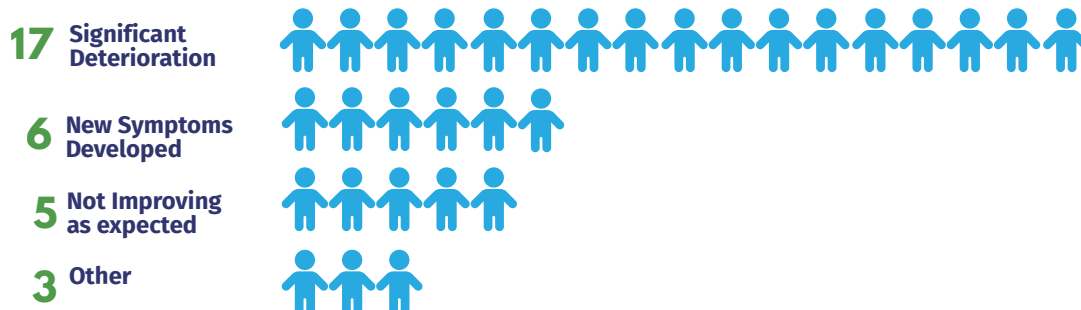


Figure 7: Reasons for re-presentation to a Queensland Health facility.

While re-presentations can indicate effective clinical care and appropriate parental recognition of a child's changing condition, systematic review of SAC1 clinical incidents involving re-presentations remains critical to uncover opportunities for earlier recognition and drive ongoing system and healthcare improvement. CISC completed a themed review of the 21 SAC1 clinical incidents involving re-presentations and identified two common themes:

- ▶ Diagnosis and Clinical Reasoning
- ▶ Safety Netting/Discharge Planning

4.2.1 Re-presentation Theme 1: Diagnosis and Clinical Reasoning

Diagnostic errors (delayed, missed or wrong diagnosis) were identified as a contributing factor in 15 of the 21 incidents reviewed (71%). 14 out of the 21 children had their diagnosis reclassified on final presentation (67%). Only 6 clinical incident reviews provided evidence that a differential diagnosis had been considered/documentated.

71%
Involved
Diagnostic
errors



Diagnostic errors occurred in the context of:

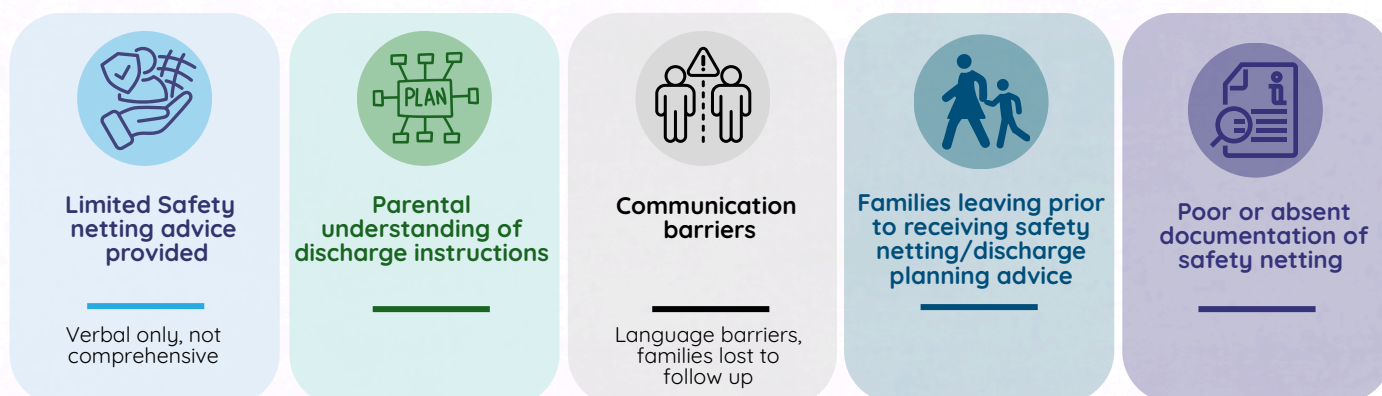
- ▶ Policy/guideline failures (9 incidents)
- ▶ Communication issues (9 incidents)
- ▶ Workforce issues (8 incidents)
- ▶ Assessment issues (8 incidents)
- ▶ Management/treatment issues (8 incidents)
- ▶ Incorrect Children's Early Warning tool usage (8 incidents)
- ▶ Limited/incomplete observations (7 incidents)
- ▶ Missed opportunities for direct senior review (4 incidents)

CISC discussions focussed on:

- the need for children who re-present with clinical deterioration to be thoroughly reassessed, including a review of the differential diagnosis and review by a more senior clinician; and
- the importance of supporting clinicians to normalise, tolerate, and manage diagnostic uncertainty and to communicate this to families so they know when to return.

4.2.2 Re-presentation Theme 2: Safety Netting and Discharge Planning

Issues with safety netting and discharge planning were identified in 10 of the 21 incidents reviewed (48%). These included:



Seven of the 10 incidents involved potentially vulnerable families, including families from culturally and linguistically diverse, Aboriginal and/or Torres Strait Islander, or socially complex backgrounds. CISC discussions noted that post discharge follow up can be impacted by families being unable to be contacted after discharge. Whilst there may many reasons for this, one of the potential barriers discussed was the use of “No Caller ID” on outgoing calls from health services.

4.2.3 Re-presentation Recommendations

The CISC committee identified 4 system-wide recommendations focussed on improving care for children who re-present to Qld Health facilities. These included:

RECOMMENDATION 1

Develop statewide tools, procedures, resources and education which supports clinicians to normalise, tolerate and manage diagnostic uncertainty.

RECOMMENDATION 2

HHSs to consider the implementation of a “one-up” rule for the management of re-presentations, requiring review by a more senior clinician (see current examples from Cairns and Hinterland HHS and Central Queensland HHS).^(17,18)

RECOMMENDATION 3

Develop a standardised paediatric discharge and safety netting process from emergency departments for paediatric patients -tailored to individual/cultural needs of families.

RECOMMENDATION 4

Investigate alternatives that could be implemented at a Statewide level to replace “No Caller ID” with one that identifies a health service.

The QPQC is currently in discussions with other Queensland Health bodies/groups to identify action partners to progress these recommendations. Early progress includes:

- ▶ The QPQC presented these findings at a “Paediatric Small Steps Big Impact” Education Session in June 2026 resulting in a re-presentation prompt being added to the primary survey section of Queensland Health early warning tools.
- ▶ E-health Queensland (as part of a pre-existing project) are undertaking a statewide rollout of Caller Line Identification (CLI), as well as conducting a CName pilot project (display “Queensland Health”), to trial replacements to the use of “No Caller ID” on Queensland Health calls.

4.2.4 Re-presentation Themed Review: Publications

Learnings were shared across Queensland Health and the broader sector through our Paediatric Matters Resource

Paediatric Matters Edition 14

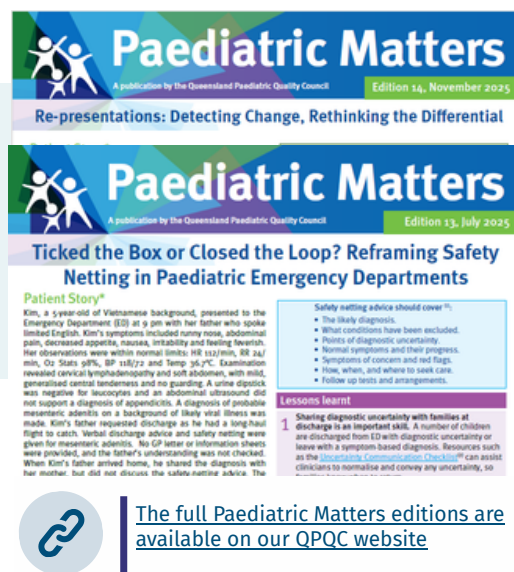
[Re-presentations: Detecting Change, Rethinking the Differential \(November 2025\)](#)

Paediatric Matters Edition 13

[Ticked the Box or Closed the Loop? Reframing Safety Netting in Paediatric Emergency Departments \(July 2025\)](#)

The QPQC has also shared learnings through presentations to Queensland Health Forums and Groups including:

- Queensland Child and Youth Clinical Network Forum, Oct 25
- Paediatric Small Steps, Big Impact Education Session, Jun 26
- Clinical Incident Management Community of Practice, Jun 26



5. Collaboration: 2024 Paediatric Patient Safety Review

CISC partnered with the Paediatric Patient Safety Review team, PSQ, Clinical Excellence Queensland on the 2024 Paediatric Patient Safety Review. This review involved an analysis of SAC1 clinical incident review reports involving critically ill children in Queensland between 1 July 2021 and 30 June 2023; as well as a review of progress against recommendations made under the initial Paediatric Patient Safety Review Report 2019.

Work was overseen by a Paediatric Patient Safety Advisory Group who provided expert advice and guidance on the review. This committee comprised interdisciplinary clinical specialists and Queensland Health network representatives (including the QPQC).

Consistent with the findings from the QPQC statewide themed reviews, the Paediatric Patient Safety Review project identified three main concerns relating to:

- ▶ Recognition of critical illness
- ▶ Response to critical illness
- ▶ Incident analysis processes

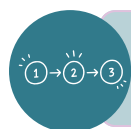
A report sharing findings and recommendations from the review was released in November 2025.⁽¹⁹⁾ This report provides eight recommendations to improve the care of critically ill children. Recommendations from the QPQC CEWT and re-presentation themed reviews were incorporated into these recommendations, in particular the need for ongoing training on the CEWT and standardised discharge processes for paediatric patients.

6. Quality of Clinical Incident Reviews (71 reports)

CISC members completed an evaluation of clinical incident review documentation against a number of quality indicators. Our goal was not to provide feedback on individual HHS reviews, but to identify opportunities at a statewide level to strengthen the clinical incident review process, so that all root causes and contributing factors can be identified and recommendations are best placed to make real improvements to patient safety and care. In sharing these findings, the committee acknowledges the significant time and effort that HHS staff put into completing complex reviews and reports to improve the quality and safety of healthcare delivery.

There was significant variability across the 71 clinical incident review reports in the types of clinical incident templates used and reviews undertaken. They included 23 Root Cause Analyses (RCAs), 20 Clinical Incident Reviews/Analyses, 17 Human Error and Patient Safety (HEAPS) reviews, with the remaining 11 reports including a mix of styles (i.e. morbidity and mortality reviews, comprehensive review incident analyses, case review reports). This variability has arisen as HHSs adapt the review forms to better suit the nature of their reviews and the complexity of the issues they are reviewing.

CISC reviewers assessed clinical incident review documentation against five quality areas:



1. Is there evidence of a comprehensive sequence of events?



2. Are the root causes identified?



3. Are the contributing factors identified and clearly documented in the report?



4. Were the patient or families' views captured?



5. Do the recommendations/lessons learnt address the root causes and contributing factors?



The first two items “comprehensive sequence of events” and “are the root causes identified” were only assessed when a full “RCA” report had been completed (n=23 incidents).

The remaining questions were assessed for all clinical incident review reports (n=71).

Key findings included:

- ▶ 83% of RCA reports (19/23) were considered to have provided a comprehensive sequence of events.
- ▶ Root causes were identified in 17 of 23 RCAs conducted. 53% (n=9) were considered to have identified all root causes, with a further 41% (n=7) partially identifying the root causes.
- ▶ Contributing factors were identified in 65/71 clinical incident reports. 57% (n=37) were considered to have identified all contributing factors for the event, with a further 40% of reports (n=26) partially identifying the contributing factors.
- ▶ Patient/families views were documented in 56% (n=40) of all clinical incident reviews.
- ▶ 61/71 clinical incident reports identified both recommendations as well as a root cause and/or contributing factor for the event (4 reports had no recommendations and 6 had no root cause or contributing factor identified). In 34% (n=21), the recommendations were considered to have addressed all root causes and contributing factors, with a further 57% of reports (n=35) having recommendations that partially addressed the root causes and contributing factors.

When compared to findings from our previous review of 2015-2019 paediatric SAC1 clinical incidents, there has been an improvement in the percentage of incidents providing a comprehensive sequence of events and documentation of family's views.⁽³⁾ Whilst there was some inconsistency in identifying all root causes and contributing factors, there was also an improvement when compared to findings from our previous review. The frequency of recommendations incompletely addressing root causes/contributing factors has been highlighted as an opportunity for improvement. The QPQC would also like to continue to advocate for the routine inclusion of family views in clinical incident reports (where appropriate).

6.1 Strength of Recommendations

Across the 71 clinical incident reports, there was a total of 305 recommendations and lessons learnt, ranging from 0-24 recommendations (average of 4) per report.

The strength of recommendations was analysed using the Department of Veterans Affairs National Centre of Patient Safety Recommended Hierarchy of Actions tool which classifies actions as “stronger, intermediate or weaker” in terms of their potential to reduce patient harm.⁽⁵⁾ Using this scale, 226 recommendations were classified as weaker actions (74%), 59 intermediate actions (19%) and 20 as stronger actions (7%).

When compared to findings from our 2015-2019 clinical incident reviews (see Figure 8), the percentage of stronger recommendations has dropped from 16% to 7%. There has also been an increase in the percentage of weaker recommendations, rising from 61% in 2015-2019 to 74% in 2020-2023 reports.

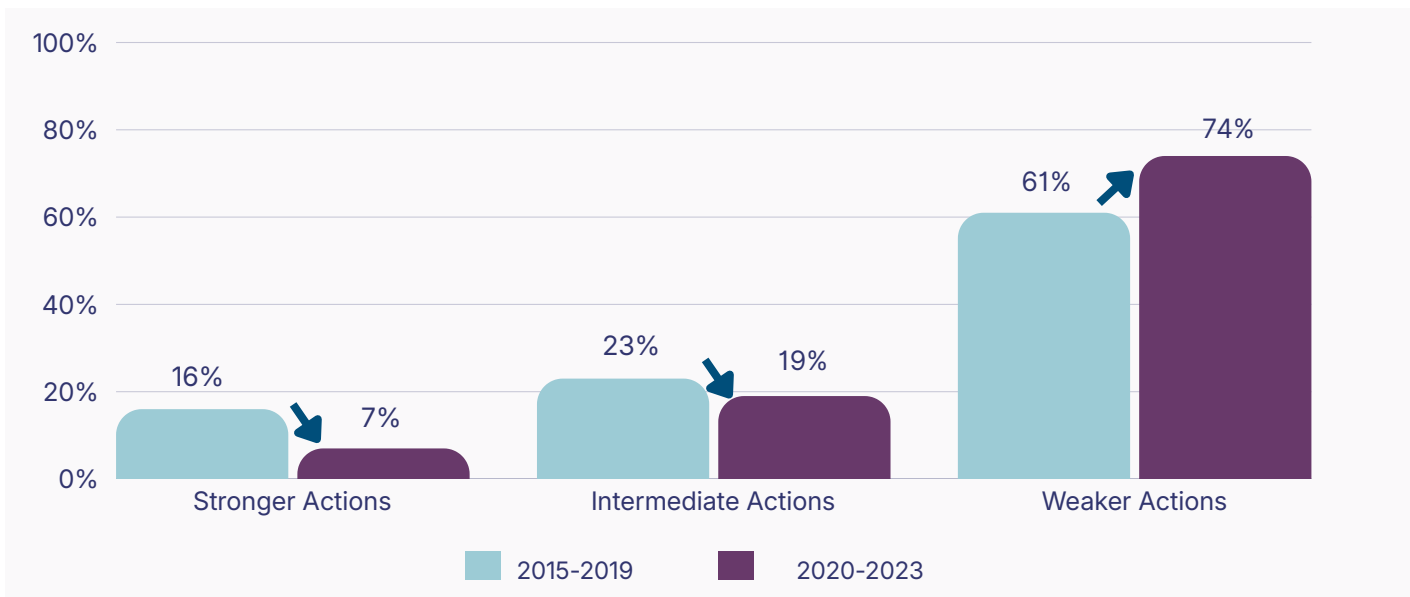


Figure 8: Strength of Recommendations (2015-2019) vs (2020-2023)

Of the 67 clinical incident reports containing recommendations, 29 reports (43%) were considered to have recommendations that were the highest strength of recommendation that could be made, suggesting opportunity for improvement in the review process rather than reflection of an underlying system improvement trend.

6.2 Enhancing the Quality of Clinical Incident Reviews

The CISC review process highlighted ongoing improvements in clinical incident review reports over time, while also identifying statewide opportunities to strengthen and enhance the effectiveness of recommendations addressing the root causes and contributing factors. To support this process, there is a need to better understand the barriers to developing stronger recommendations across Queensland Health, as well as any incentives or underlying reasons driving a focus on weaker strength recommendations.

As a first step, this should involve statewide and local-level discussions with all staff involved in the clinical incident review process to build a shared understanding of the issues and support a collaborative approach to change.

The committee also advocated the need for targeted strategies to support HHSs during the clinical incident review process, including:

- ▶ Specialised clinical incident review templates for priority or frequently occurring incidents (i.e. sepsis, re-presentation); and
- ▶ Best practice exemplars to be made available to HHSs to support the use of clinical incident review templates.

CISC also identified four key recommendations for quality improvement through our themed reviews of clinical incidents involving the CEWT and re-presentations. These included:

RECOMMENDATION 1

Greater inclusion of CEWT charts in clinical incident review reports involving issues with the use of CEWT. This would lead to greater clarity regarding the concerns raised in the report and support the sharing of learnings.



RECOMMENDATION 2

Clinical reasoning should be explored and documented in clinical incident reviews. This would provide an opportunity to better identify contributing factors along the diagnostic pathway, particularly in clinical incidents involving deterioration or re-presentations. In our themed review of re-presentations, only 6/21 clinical incident reports reviewed provided evidence that a differential diagnosis had been considered, despite diagnostic error being identified as a factor in 15/21 clinical incident reports reviewed.



RECOMMENDATION 3

Where multiple HHSs or facilities are involved in the care of the child, clinical incident reviews should examine all episodes of care (not just the care received on the final presentation). This ensures that all contributing factors – particularly those arising during earlier presentations or transition of care – can be identified. This was identified as a priority in our themed review of re-presentations, where missed opportunities for joint review and reviews of care across the clinical pathway were noted.



RECOMMENDATION 4

All clinical incident reviews need to explicitly consider and document the impact of local workforce issues during the clinical incident (including rostering, capacity and fatigue) and consider local level responses to these. Our CISC review identified missed opportunities to consider these factors, despite workforce issues being identified as a contributing factor in Queensland Health clinical incident review templates.



Recommendations 2, 3 and 4 were also identified as key opportunities for improvement in our 2015-2019 Summary Report, highlighting the need for ongoing work in these areas.

The QPQC forwarded these recommendations to PSQ for their consideration and response. PSQ have undertaken the following activities in line with these recommendations:

1. Clinical Incident Templates and Clinical Incident Management Report Writing e-learning module to prompt inclusion of sections of statewide forms/tools/pathways (Completed).
 - 1.1 The PSQ Clinical Incident Analysis template includes a prompt to include any statewide form/tool and pathway; and the contributing factors section also includes prompts for the assessment of local workforce issues, including rostering, capacity and fatigue.
 - 1.2 The Clinical Incident Management Report Writing Module now includes prompts for the inclusion of sections of statewide forms/tools/pathways; and provides examples, including a link to the full suite of Recognising and Responding to Deterioration tools.
2. The “Multi- Health Service and Cross Agency Clinical Incident Review” factsheet has been updated and published with the “benefits” updated in response to these recommendations including:
 - 2.1 Improved visibility of the patient’s full episode of care, including prior presentations/ re-presentations and transitions of care; and
 - 2.2 Shared understanding of contributory factors across services.
3. Updates will be made to Clinical Incident Management online modules to include a specific section to highlight the benefits of multi-service reviews, with a link to the updated factsheet (planned).
4. A review of the Contributing Factors Framework is in progress, which includes workforce issues and a specific section to include factors such as cognitive biases, differential diagnosis, delays or missed diagnosis, second opinion/escalation and clinical reasoning.
5. The QPQC team presented their findings and recommendations to the Clinical Incident Management Community of Practice on 10 June 2026, and a copy of the presentation and recommendations were shared broadly across the Clinical Incident Management email group.
6. PSQ have been working with the Paediatric Patient Safety Review team on a draft “Paediatric Infection Related Clinical Incident” template, which includes a focus on deterioration, re-presentations and use of the CEWT, including a prompt to include any statewide form/tool and pathway. The contributing factors framework also included prompts for assessment of local workforce issues, including rostering, capacity and fatigue.

The QPQC will continue to look for opportunities to share learnings from clinical incident reviews and to promote best practice in clinical incident management, working in partnership with key stakeholders including PSQ and the Queensland Children’s Critical Incident Panel.

7. Conclusion

This report shares statewide themes and recommendations from the CISC's statewide multi-incident analysis of 70 serious adverse clinical incidents involving children in Queensland between 2020 and 2023. These incidents represent rare but high consequence events, with findings from the review highlighting system level risks and opportunities to strengthen paediatric patient safety and care, particularly relating to:



Recognition and
escalation of
deterioration



Diagnostic process
and management of
uncertainty



Transitions of care,
including safe
discharge
and management of
re-presentations



The effectiveness
of clinical incident
review systems

A total of 11 recommendations were identified, focusing on strengthening the use of the CEWT tool, management of re-presentations, as well as strengthening clinical incident review processes (see Appendix B). The QPQC will continue to work with action partners across Queensland Health to progress these recommendations, with a focus on strengthening clinical processes, improved decision-making, recognition of vulnerable families (including infants, young children and Aboriginal and/or Torres Strait Islander children) and high-quality care for all children across Queensland.

Appendix A: Clinical Incident Subcommittee Members

Clinical Incident Subcommittee 2025 – 2026

CHAIR

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QPQC Chair, Director of Paediatrics, Sunshine Coast University Hospital, Sunshine Coast Health

DEPUTY CHAIR

A/PROF BEN LAWTON

Senior Staff Specialist Paediatric Emergency Physician, Logan Hospital, Metro South Hospital and Health Service

DR CHRISTOPHER EDWARDS

Director Medical Services, Staff Specialist in Paediatrics, Bundaberg Base Hospital, Wide Bay Hospital and Health Service

PROFESSOR MARCUS WATSON

Professor, The School of Psychology, University of Queensland, Enterprise Senior Fellow-MedTech, Faculty of Engineering and Information Technology, University of Melbourne

DR BRETT HOGGARD

Medical Director, Retrieval Services Queensland, Department of Health

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LYNETTE ADAMS

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Appendix B: Clinical Incident Subcommittee Recommendations

1. Emergency Departments be a priority for education/ training/resources to support the use of CEWT.
2. Training and resources should focus on supporting the correct documentation/calculation of CEWT scores and appropriate clinical responses.
3. Statewide communication or guidelines should be released, including requirement for measuring blood pressure on the CEWT and how to overcome any barriers.
4. Development of statewide tools, procedures, resources and education which supports clinicians to normalise, tolerate and manage diagnostic uncertainty.
5. HHSs to consider the implementation of a “one-up” rule for the management of re-presentations, requiring review by a more senior clinician
6. Development of a standardised paediatric discharge and safety netting process from emergency departments for paediatric patients -tailored to individual/cultural needs of families.
7. Investigate alternatives that could be implemented at a Statewide level to replace “No Caller ID” with one that identifies a health service.
8. Greater inclusion of CEWT charts in clinical incident review reports involving issues with the use of CEWT.
9. Clinical reasoning should be explored and documented in clinical incident reviews.
10. Where multiple HHSs or facilities are involved in the care of the child, clinical incident reviews should examine all episodes of care (not just the care received on the final presentation).
11. All clinical incident reviews need to explicitly consider and document the impact of local workforce issues during the clinical incident (including rostering, capacity and fatigue) and consider local level responses to these.

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