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# Paediatric early warning system – clinical governance recommendations

Purpose

These recommendations are for project teams responsible for implementing and improving paediatric early warning systems within Aotearoa New Zealand hospitals. They explain the importance of aligning systems for paediatrics with other recognition and response clinical governance structures.

Background

Serious adverse events, including death, affect tamariki in hospital. Some of these events, or their outcomes, are preventable.

While there is limited published evidence of the exact frequency or consequence of failure to recognise or respond to acute deterioration in tamariki in AotearoaNew Zealand hospitals, the use of paediatric early warning tools and a systematic approach to escalation and response to tamariki at risk of deterioration are widely recommended.[[1]](#footnote-2),[[2]](#footnote-3),[[3]](#footnote-4) [[4]](#footnote-5) Available evidence suggests opportunities for improvement in care processes include vital sign recording, escalation to experienced clinicians, timely senior review, and documentation and communication around episodes of acute paediatric deterioration.[[5]](#footnote-6),[[6]](#footnote-7),[[7]](#footnote-8) [[8]](#footnote-9)

Introduction

The national paediatric early warning system requires a clinical governance committee to oversee and give expert advice about its safety, effectiveness and ongoing improvement.

Hospitals with well-established paediatric early warning systems may already have paediatric clinical governance processes that are working well. Others may need to establish a new clinical governance committee or new reporting arrangement within an existing paediatric clinical governance system. Smaller centres may rely on existing groups, such as organisation-wide patient safety and quality committees, for clinical governance.

For a paediatric early warning system to work well, improve and be sustainable, organisations must:

* have underpinning structures for clinical governance, teamwork, handover and communication, education, measurement, and evaluation
* have clinical and administrative resourcing
* have visible and ongoing executive, clinical and operational leadership
* include recognition and response systems in the strategic plan to make a hospital safer[[9]](#footnote-10)
* in specialised settings:
  + align the system with other hospital systems
  + involve a whole-of-hospital approach
  + link to hospital-wide clinical governance.

Those who are accountable for the performance of the system must oversee a range of activities such as policy and process development, evaluation and quality improvement, adequate staff resourcing and equipment, education and whānau engagement.

A collaborative model of executive, clinical and operational leadership is needed. For more advice, please refer to the Health Quality & Safety Commission publications *Clinical governance*[[10]](#footnote-11) and *From knowledge to action*.[[11]](#footnote-12)

Terms of reference

The terms of reference for clinical governance of a paediatric early warning system should include:

* purpose
* membership (including whānau who regularly access paediatric services, and Māori health outcomes team)
* responsibilities
* organisational reporting requirements
* meetings and decision-making
* terms and conditions of appointment.

An example terms of reference for the wider hospital adult recognition and response governance committee is available on the Health Quality & Safety Commission website.[[12]](#footnote-13)

The adult committees changed their terms of reference to include maternity representatives in early 2019. Once the paediatric early warning system is implemented in hospitals, terms of reference should be updated again to include paediatrics.

The paediatric early warning system should be a standing item on the already-established paediatric service clinical governance structure. This structure will have a reporting line to the wider hospital clinical governance, such as the clinical board.

Responsibilities of the paediatric clinical governance committee and its members

Policy and resourcing

The paediatric clinical governance committee is responsible for:

* developing and monitoring local policy and implementation of the paediatric early warning system
* guidance on criteria and frequency of vital sign observations
* escalating any resourcing concerns within the organisation.

Effectiveness

The paediatric clinical governance committee monitors the effectiveness of the paediatric early warning system by reviewing audit reports (process measures), outcome and balancing measures and addressing barriers the project team may encounter. It must also address unwarranted variations in escalations and response systems and establish a culture of respect between professional groups and speciality teams.

Data that may be collected and reviewed as part of system monitoring includes:

* rates of unplanned increased resource or transfers to higher acuity care (eg, intensive care unit, high dependency unit or tertiary hospital)
* audits of vital sign and early warning score documentation
* data from electronic systems to identify missed or delayed escalation
* data from retrospective case note review and multidisciplinary paediatric morbidity reviews to identify missed or delayed escalation or insufficient response
* periodic surveys of staff attitudes and whānau experiences of using the paediatric early warning system, including whānau escalation of concern.
* The effectiveness of the system should continue to be measured and reviewed as part of the sustainability of the project, however ongoing data collection may be less frequent than during the implementation phase.
* If the measures show a trend away from the benchmark set during the implementation phase, the clinical governance committee has a responsibility to understand the reasons for this and to implement a plan to address it.

Refer to the PEWS measurement guidance provided by the Health Quality & Safety Commission for more information about measures and definitions.

Clinical leadership

Clinical leadership from medicine, nursing and allied health is required for establishing and maintaining successful early warning systems.

The members of the paediatric clinical governance committee role-model the importance of early recognition and response to paediatric deterioration through their own clinical behaviour.

Responsibilities of clinical leaders may include:

* advocating for use of the paediatric early warning system with colleagues
* working with the team responsible for Māori health outcomes and consumers to   
  co-design local elements of the system (for example, whānau escalation pathways and links to the hospital Kōrero mai[[13]](#footnote-14) process)
* collaborating with colleagues with expertise in Māori health, patient safety and quality improvement to design processes, policies and improvements to the local system
* providing or seeking expert clinical advice to inform case investigations involving failures to recognise or respond to deterioration
* advising on the content of education about topics such as vital sign and paediatric early warning score measurement and documentation, escalation of care, assessment and care of a tamariki when their condition deteriorates, teamwork, handover and communication.

Day-to-day management

The paediatric clinical governance committee is responsible for ensuring the day-to-day management of the paediatric early warning system is allocated to an identified person (or people) with the relevant skills, experience and delegations to manage operational requirements. This may be a specifically established role in large hospitals or incorporated into existing roles in smaller hospitals.

Responsibilities of the paediatric operational leader(s) include coordination and oversight of:

* managing specialist responders (for example, intensive care outreach nurses, patient-at-risk (PAR) teams or other senior medical and nursing staff)
* availability of staff education about the recognition and response to the deteriorating tamariki
* data collection and reporting (or allocation of same)
* policy and process implementation
* managing day-to-day process issues.

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7. Health and Disability Commissioner. 2015. Case 13HDC00482 Anaesthetist, Dr B; Registered Nurse, RN D; Registered Nurse, RN C; West Coast District Health Board. Wellington: Health and Disability Commissioner. [↑](#footnote-ref-8)
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12. Health Quality & Safety Commission. 2021. *Clinical governance recommendations for recognition and response systems.* Wellington: Health Quality & Safety Commission. URL: [www.hqsc.govt.nz/resources/resource-library/clinical-governance-recommendations-for-recognition-and-response-systems/](http://www.hqsc.govt.nz/resources/resource-library/clinical-governance-recommendations-for-recognition-and-response-systems/). [↑](#footnote-ref-13)
13. See [www.hqsc.govt.nz/our-work/improved-service-delivery/patient-deterioration/workstreams/patient-family-and-whanau-escalation/](http://www.hqsc.govt.nz/our-work/improved-service-delivery/patient-deterioration/workstreams/patient-family-and-whanau-escalation/). [↑](#footnote-ref-14)