

Te Tāhū Hauora
Health Quality & Safety
Commission

**Patient tracer audit guide:
patient deterioration systems |
He aratohu tātari mō te whai
tūroro**

August 2023 edition



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Document purpose | Te whāinga

The purpose of this guide is to outline the essential components of a fully implemented recognition and response system for adult, maternity and paediatric patients, with suggested questions to help with the tracer audit. We see this guide as being useful for health care organisations that want to fully implement the programme and for HealthCERT audit agencies seeking to provide feedback and opportunities for improvement.

This guide was updated in August 2023 to include paediatrics, following implementation of the national paediatric early warning systems in health districts across Aotearoa New Zealand.

Introduction | He kupu whakataki

The national patient deterioration programme of Te Tāhū Hauora Health Quality & Safety Commission (Te Tāhū Hauora) aims to reduce harm from failures to recognise or respond to acute physical deterioration for hospital inpatients.

Te Tāhū Hauora asked hospitals to make improvements to their recognition and response systems using:

- the national adult vital signs chart with New Zealand early warning score (NZEWS) (or electronic equivalent) and a localised escalation pathway
- effective clinical governance and leadership
- appropriate clinical and non-technical education and training
- ongoing measurement for improvement
- Kōrero mai (patient and whānau escalation of care) processes
- approaches to discussing and documenting shared goals of care.

Te Tāhū Hauora worked with the Maternal Morbidity Working Group and the maternity sector to establish a national maternal early warning system (MEWS). MEWS aims to identify acute deterioration in women who are admitted to a hospital during pregnancy or within 42 days of birth.

Te Tāhū Hauora also worked with the Paediatric Society of New Zealand to develop a national paediatric early warning system (PEWS) to help clinicians identify hospitalised tamariki with the potential to deteriorate, so they can respond quickly.

Both the MEWS and PEWS use national vital signs charts with early warning scores and localised escalation pathways, as well as other aspects that align with the initiatives described in the bullets above. For this reason, MEWS and PEWS are included as components of this tracer guide.

Components of an effective recognition and response system | Ngā waehanga o tētahi pūnaha āhukahuka, pūnaha urupare

To be effective and sustainable, a recognition and response system must have components that help staff to recognise and respond to deterioration. They also need underpinning structures for clinical leadership and governance, clinical and administrative resource, education and training, teamwork and communication and measurement for continuous improvement.

The ‘recognition’ components

To recognise clinical deterioration, staff must accurately and regularly measure vital signs to detect physiological abnormalities (DeVita et al 2011). An early warning score is an aggregate score that staff calculate from a matrix built into the patient’s vital signs chart and use to identify deterioration. The score increases as a patient’s vital signs deviate further from normality and triggers staff to act when certain thresholds are reached.

The recognition components of the system are designed to provide objective criteria for escalating care, a clinical safety net for detecting acute deterioration and agreed processes for escalating care to responding clinicians who have appropriate skills. These components do not remove the need for clinicians to use clinical judgement.

International evidence indicates that clinical concern is one of the most common reasons for calls to rapid response teams (Jones et al 2006; Santiano et al 2009). For this reason, a criterion for escalating care based solely on clinician ‘worry’ is part of the escalation pathway. This criterion also includes patient and whānau ‘worry’ (Figure 1).

Figure 1: Clinician, patient and whānau ‘worry’ wording on adult, maternity and paediatric vital signs charts

Adult	ESCALATE CARE FOR ANY PATIENT YOU, THEY OR THEIR FAMILY ARE WORRIED ABOUT, REGARDLESS OF VITAL SIGNS OR EWS
Maternity	ESCALATE CARE FOR: <ul style="list-style-type: none">• ANY WOMAN YOU, THEY OR THEIR FAMILY ARE WORRIED ABOUT, REGARDLESS OF VITAL SIGNS OR EARLY WARNING SCORE• ACUTE FETAL CONCERN
Paediatric	ESCALATE CARE FOR ANY PATIENT YOU OR THEIR WHĀNAU ARE WORRIED ABOUT, REGARDLESS OF VITAL SIGNS OR PEWS

Patients and whānau must be supported to escalate concerns and be involved in making shared decisions about appropriate responses to acute deterioration. Their involvement in these ways is important to the success of recognition and response systems. It is possible to achieve this by implementing patient and whānau escalation pathways, discussing the patient’s preferences for care early, and sharing decision-making about curative, restorative or palliative goals of care (Carey et al 2015; Gill et al 2016; You et al 2014). Such activities

can improve communication, provide better experiences for patients, whānau and clinicians and prompt staff to respond appropriately to acute deterioration (Berger et al 2014; Brady et al 2015; Downey et al 2013). See the 'Kōrero mai' and 'Shared goals of care' sections for more information.

Staff must escalate care in line with the shared goals of care plan that has been agreed following a discussion about goals of care for the admission with the patient and whānau. See the 'Shared goals of care' section for more information.

The 'response' component

The response component of the system involves getting responders with appropriate skills to the bedside to treat the illness at the level of severity the patient is experiencing (DeVita et al 2011). The appropriate responder depends on the early warning score. For example, a junior doctor from the primary team might respond to marginally deranged vital signs, while an intensive-care-based rapid response team might respond to severely abnormal vital signs.

The response arm of the system will vary according to the local context of the hospital. For example, a small rural facility may rely on expert senior nurses to fulfil the role that a multidisciplinary rapid response team would perform in a large tertiary hospital.

See the escalation mapping tool (Health Quality & Safety Commission 2021a) for further information on the process of agreeing local escalation pathways.

Any response to escalation needs to consider the patient's shared goals of care plan. That plan sets out what has been agreed with the patient and whānau if the patient deteriorates during their hospital admission.

Underpinning components

Recognition and response systems require a whole-of-hospital approach if they are to work successfully and achieve sustained improvement (ACSQHC 2021; DeVita et al 2011). They must be part of the organisation's strategic plan to improve patient safety. To have adequate support, they must have visible and ongoing executive, clinical and operational leadership and clear clinical governance structures.

Those who are accountable for the performance of the recognition and response system must oversee a range of activities to keep the system sustainable. These activities include:

- policy review
- ongoing measurement and learning through routine monitoring, case review, evaluation of the impact of the system and identifying areas for improvement
- resourcing and equipment update
- ongoing education and training, including orientation of new staff
- monitoring and encouraging the engagement of patients and whānau.

A collaborative model of executive, clinical and operational leadership is required to keep the focus on patient safety.

Recognising and responding to adult patient deterioration | Te āhukahuka me te urupare ki tō te tūrora pakeke māwhe

The patient deterioration programme developed a range of tools and guidance that support organisations to prepare for and implement improvements to their recognition and response system. These documents can be found on the Te Tāhū Hauora website:

www.hqsc.govt.nz/our-work/improved-service-delivery/patient-deterioration.

Essential aspects of implementing an effective recognition and response system are to:

- have effective governance in place with evidence of review of data and appropriate response if needed, and including reporting of outcomes at all levels of the organisation
- establish policy and procedures outlining requirements of the system
- make staff aware of their role in recognising and responding to patient deterioration
- use the national adult vital signs chart with NZEWS and include a localised escalation pathway (or electronic equivalent)
- provide education about recording observations and escalation pathways, particularly at orientation
- monitor chart completion on an ongoing basis, including accurately recording NZEWS and modifying vital signs parameters appropriately
- have a clinical expert review all cardiac arrests, unplanned returns to theatre and unplanned transfers to the intensive care unit (ICU) and follow up with quality improvements as needed.

A measurement framework nationally standardises the data being collected. It includes the collection of local audit data to monitor how well the system is operating, as well as local and national outcome measures to monitor impact (see more information on quality and safety markers for patient deterioration). Additionally, organisations can use the patient deterioration domain of the Atlas of Healthcare Variation to support ongoing monitoring of the system.

Recognising and responding to maternity patient deterioration | Te āhukahuka me te urupare ki tō te tūrora hapū māwhe

The system is designed to identify acute deterioration in patients who are admitted to a hospital during pregnancy or within 42 days of birth (not routinely during labour).

Some of the essential aspects of this implementation are the same as for adult patient deterioration, as described above. Additional essential aspects involve:

- using the national maternity vital signs chart with maternity early warning score and a localised escalation pathway (or electronic equivalent)

- having the maternity vital signs chart in use hospital wide so that all staff use the correct chart for all pregnant or recently pregnant patients to reflect the physiological changes of pregnancy
- providing education about MEWS across all hospital areas that may care for patients during pregnancy or within 42 days of birth
- gathering evidence of appropriate use of the maternity vital signs chart and escalation processes in non-maternity areas
- establishing an escalation process for concerns that clinicians, patients and whānau may have.

Te Tāhū Hauora handed the MEWS programme to the Manatū Hauora | Ministry of Health maternity team and the maternity quality and safety programme in December 2020 for ongoing monitoring and sustainability.

Recognising and responding to paediatric deterioration | Te āhukahuka me te urupare ki te māwhe o te mātai mātātahi

The PEWS is designed to identify early signs of deterioration for infants and children in hospital. The essential aspects of this implementation are the same as for adult patient deterioration, as described above. In addition, it is important to note that:

- The PEWS uses four standardised paediatric vital signs charts, banded by age. It is important that the correct age-based chart is used.
- Clinicians are required to assess and document whānau concern with each set of vital signs.

Kōrero mai – patient and whānau escalation of care processes | Kōrero mai – te tere whakamōhio i ngā tukanga tauwhiro

Patients and whānau often recognise subtle signs of patient deterioration even when vital signs are normal. Failures to adequately respond to concerns raised by patients and whānau are commonly highlighted in the Health and Disability Commissioner's reports on adverse events that involve clinical deterioration.

Communication failure was the most common theme identified in an analysis of serious adverse events related to clinical deterioration that were reported to Te Tāhū Hauora. Having processes to support escalation of patient and whānau concerns about deterioration is critical to the success of a recognition and response system.

Evidence shows that engaging patients and whānau results in better health and care outcomes (Doyle et al 2013). With such engagement, the patient and whānau are more likely to feel valued and involved in their treatment, and their experience in hospital is better.

Using co-design methodology to develop, implement and evaluate Kōrero mai is essential for a localised process to support patient and whānau escalation. See the guide to help

hospitals implement Kōrero mai at www.hqsc.govt.nz/our-work/improved-service-delivery/patient-deterioration/workstreams/patient-family-and-whanau-escalation/a-guide-to-co-designing-your-korero-mai-service (Health Quality & Safety Commission 2021b).

Essential aspects of implementing Kōrero mai are to:

- show evidence of co-design to develop, implement and regularly evaluate the patient and whānau escalation process and any escalations
- provide education about the Kōrero mai escalation process at orientation and in ongoing training for all staff
- make information for patients and whānau available in clinical areas
- educate responders to support patient and whānau escalations
- establish governance and reporting at all levels of the organisation about patient and whānau escalation and response
- have staff report awareness and support for patient and whānau escalation.

Shared goals of care approaches | Kia ōrite ngā whāinga mō ngā tukanga tauwhiro

In a shared goals of care approach, clinicians, patients and whānau explore patients' values and the care and treatment options available and agree on the goal of care for the current admission if the patient deteriorates. When shared goals provide the basis for clinical treatment plans, there is less risk that a patient will receive unwanted or unwarranted treatments if their condition deteriorates.

Health service providers will take a systems-level approach to shared goals of care so that these discussions with patients and whānau occur and are in line with their Te Tiriti o Waitangi responsibilities.

This section sets out the principles for shared goals of care, which we have written mainly for hospitals to use, but they may also apply in other settings. The principles outline what providers must do to have shared goals of care discussions with adult patients and whānau. The three articles of Te Tiriti o Waitangi and the Ritenga Māori declaration are embedded in the shared goals of care principles.

The following are the shared goals of care principles.

1. Shared goals of care are when clinicians, patients and whānau explore patients' values, the care and treatment options available and agree the goal of care for the current admission if the patient deteriorates.
2. Health service providers ensure that governance systems, organisational culture and structures encourage shared goals of care discussions through resourcing and by supporting clinicians, patients and whānau to have these discussions.
3. Cultural safety is an essential component of shared goals of care discussions.
4. Patients, whānau and clinicians are supported before, during and after shared goals of care discussions.
5. Patients have those they want to have with them, including those who have decision-making responsibilities.

6. Shared goals of care discussions take place in appropriate environments to maintain patients' privacy and dignity.
7. Shared goals of care discussions are facilitated by the appropriate clinician(s) and may include other members of multi-disciplinary teams involved in patients' care.
8. Shared goals of care discussions happen as early in the admission as possible and with the agreement of the patient. The patient, whānau or clinician can begin the discussion.
9. Shared goals of care discussions result in a shared understanding through engaging with the patient and whānau, sharing the clinician's understanding and exploring the patient's values and what is important to them.
10. Shared goals of care discussions and decisions are documented in a clearly identifiable and accessible clinical form, with information available to all clinicians caring for patients.

Essential features of implementing shared goals of care are to:

- clearly show the hospital is following the principles in all aspects of its shared goals of care approach
- have in place governance of and reporting about shared goals of care at all levels of the organisation, which is linked to the recognition and response system's clinical governance group, and strong links with advance care planning and end-of-life care pathways
- educate all staff about the shared goals of care, both at orientation and on an ongoing basis
- educate clinicians on using a clinical communications skills framework, like the [Serious Illness Conversation Guide](#) (Health Quality & Safety Commission 2022)
- make information for patients and whānau available in clinical areas
- have staff report awareness and support for shared goals of care.

More information and resources about patient deterioration can be found on the Te Tāhū Hauora website: www.hqsc.govt.nz/our-work/improved-service-delivery/patient-deterioration.

Governance – essential components and tracer questions | Mana whakahaere – ngā tino waehanga me ngā pātai mō te whai

	Component	Suggested questions	Comments/notes
1	<p>Governance</p> <p>See Clinical governance: Guidance for health and disability providers (Health Quality & Safety Commission 2017)</p> <p>Evidence options</p> <p>Strategic plan</p> <p>Reporting structure for PD and MEWS</p>	<ul style="list-style-type: none"> • Does the organisation have a strategic plan related to PD, MEWS and PEWS? • Does this plan have milestones? • Does this plan set out how governance of PD, MEWS and PEWS reports to the executive and board of the organisation? • Does this plan identify which committee leads and provides clinical governance for PD, MEWS and PEWS in the organisation? • What is the ongoing measurement for PD and how is it reported? 	
2	<p>Governance – patient deterioration (PD)</p> <p>See clinical governance recommendations for recognition and response systems</p> <p>Evidence options</p> <p>Reporting structure for PD</p> <p>Terms of reference of any governance group(s) that include PD</p> <p>Meeting agendas, minutes/reports from relevant groups</p>	<ul style="list-style-type: none"> • What is the name of the clinical governance group(s) responsible for adult, maternity and paediatric patient deterioration? • Who are the members of the governance group(s)? How are consumers represented? • How frequently do the governance group(s) receive and act on reports on how the recognition and response system is working? • Is effective governance in place? 	

	Component	Suggested questions	Comments/notes
	Position description for PD lead(s)	<ul style="list-style-type: none"> • Which clinical areas are using the national adult, maternity and paediatric vital signs charts (or electronic equivalent)? • If not all appropriate areas are using it, when will they start doing so? • What are the roles and responsibilities for maintaining the recognition and response system at each level of the organisation? • Are one or more clinical experts providing ongoing oversight and monitoring? • Is a rapid response team (medical emergency team or other) in place? • Is a nurse-led outreach team (eg, patient at risk [PAR] or physiologically unstable patient [PUP] team) in place? • What hours and hospitals do these teams cover? • What are the responsibilities of these teams and how are outcomes monitored? 	
4	Governance – Kōrero mai Evidence options Reporting structure for PD Terms of reference of any governance group(s) that include Kōrero mai Meeting agendas, minutes/reports from relevant groups	<ul style="list-style-type: none"> • Has a patient and whānau escalation of care process been established as part of the recognition and response system? • Which clinical areas does this process cover? If it does not cover all appropriate areas, when will it do so? • How was the process designed and implemented? 	

	Component	Suggested questions	Comments/notes
		<ul style="list-style-type: none"> • How are or were patients and whānau consumers involved in developing (co-designing) the process? • What are the roles and responsibilities for maintaining Kōrero mai at each level of the organisation? • Who has operational oversight of Kōrero mai? • Which group(s) provide governance of Kōrero mai? • How are patients and whānau represented in governance of Kōrero mai? • How frequently do the governance group(s) receive and act on reports on how Kōrero mai is working? 	
5	<p>Governance – shared goals of care (SGoC)</p> <p>Evidence (examples)</p> <p>Reporting structure for PD</p> <p>Terms of reference of any governance group(s) that include SGoC</p> <p>Meeting agendas, minutes/reports from relevant groups</p> <p>Position description for lead</p>	<ul style="list-style-type: none"> • Has the organisation implemented SGoC as part of its recognition and response system? • If not, when does it plan to develop and implement SGoC? • If the organisation has implemented SGoC, which clinical areas does this approach cover? If it does not cover all appropriate areas, when will it do so? • What are the roles and responsibilities for maintaining SGoC at each level of the organisation? • Who has operational oversight of SGoC? 	

Component	Suggested questions	Comments/notes
	<ul style="list-style-type: none"> • Which group provides governance of SGoC? • How has the organisation linked SGoC with its advance care planning and end-of-life care programmes? • How has the organisation linked SGoC with communication training, for example, the serious illness conversation guide? • How are SGoC discussions and any feedback evaluated? • What processes are in place to support patients, whānau and clinicians before, during and after SGoC discussions? • Does active evidence show that the governance group supports the 10 principles of SGoC (especially the principles where the governance group would address barriers to implementing them)? 	

Abbreviations: MEWS = maternity early warning system; PAR = patient at risk; PD = patient deterioration; PEWS = paediatric early warning system; PUP = physiologically unstable patient; SGoC = shared goals of care.

Further notes

Policy, procedure and documentation – essential components and tracer questions | Kaupapa here, tukanga me te tuhi kōrero – ngā tino waehanga me ngā pātai mō te whai

	Component	Suggested questions	Comments/notes
1	<p>Policy, procedure and documentation – adult, maternity and paediatric PD</p> <p>Evidence options</p> <p>Policy covering all aspects of PD, MEWS and PEWS</p> <p>Clinical handover policy, eg, the ISBAR communication tool</p> <p>Procedures/guidelines as needed</p> <p>Audit evidence</p>	<ul style="list-style-type: none"> • Do specific policies cover adult, maternity and paediatric PD? • Are all policies current? • Does policy reflect best practice guidelines? • Do any policies cover all components of the recognition and response systems? • Does the policy give clear guidance on: <ul style="list-style-type: none"> ○ frequency of vital signs monitoring ○ where and when to use maternity vital signs charts (MVSC), adult vital signs charts (AVSC) and paediatric vital signs charts (PVSC) ○ which clinicians can modify the early warning score triggers ○ appropriate ways to modify the early warning score triggers ○ what to do if the escalation pathway is triggered (EWS/MEWS 1–10+ and PEWS 1–8+) ○ documentation requirements for responders? 	

	Component	Suggested questions	Comments/notes
2	<p>Policy, procedure and documentation – vital signs charts (or electronic equivalent)</p> <p>Evidence options NZEWS in use (sample chart) MVSC in use (sample chart) PVSC in use (sample charts) Spread across organisation Feedback process/mechanisms in place</p>	<ul style="list-style-type: none"> • Do the vital signs charts give clear guidance on what to do if the escalation pathway is triggered (EWS/MEWS 1–10+ and PEWS 1–8+)? • Does the escalation pathway give clear guidance on: <ul style="list-style-type: none"> ○ who to call and how ○ response times? • Where do clinicians make modifications to the early warning score triggers? • How do escalations incorporate the concerns of clinicians, patients and whānau? 	
3	<p>Policy, procedure and documentation – Kōrero mai</p> <p>Evidence options Policy/procedure</p>	<ul style="list-style-type: none"> • Which policy/procedure covers Kōrero mai (or similar)? • Is this policy/procedure current? 	
4	<p>Policy, procedure and documentation – SGoC</p> <p>Evidence (examples) Policy that reflects all SGoC principles Policy related to resuscitation status and enduring power of attorney (EPoA) documentation</p>	<ul style="list-style-type: none"> • Which policy covers SGoC? • Which patient groups does SGoC cover? • In what timeframes do SGoC discussions start? • Which clinicians are considered ‘appropriate clinicians’ to facilitate SGoC discussions? • How do you recognise and record advance care plan and EPA information 	

Component	Suggested questions	Comments/notes
<p>Policy related to advance care plan integration</p> <p>Documentation shows the presence of appropriate support</p> <p>Documentation captures all aspects of the Te Tāhū Hauora SGoC form (must include four options A, B, C, D consistent with national form)</p> <p>Documentation is present and accurate</p> <p>Documentation is readily available</p> <p>Documentation reflects shared understanding</p> <p>Staff aware of location and purpose of form/electronic record of SGoC</p> <p>SGoC information shared with primary care on discharge</p>	<p>and incorporate it into SGoC decision-making?</p> <ul style="list-style-type: none"> • What documentation do you use to record SGoC discussions in your area? • Does the documentation reflect the discussion with the patient and whānau? • What is the process for reviewing these SGoC decisions if the patient's condition changes? • If the patient deteriorates, how do recognisers and responders access the SGoC form and use this to inform their response? • How does the organisation share information on SGoC decisions with other providers of care (eg, primary care, aged care)? 	

Abbreviations: AVSC = adult vital signs charts; EPoA = enduring power of attorney; EWS: early warning score; ISBAR = Introduction, Situation, Background, Assessment and Recommendation (framework); MEWS = maternity early warning system; MVSC = maternity vital signs charts; PD = patient deterioration; PEWS = paediatric early warning system; PVSC = paediatric vital signs charts; SGoC = shared goals of care.

Further notes

Education – essential components and tracer questions | Mātauranga – ngā tino wāhanga me ngā pātai mō te whai

	Component	Suggested questions	Comments/notes
1	<p>Education – adult, maternity and paediatric patient deterioration</p> <p>Evidence options Orientation programme Education plans Education records Staff attendance register Evaluation/feedback on education</p>	<ul style="list-style-type: none"> • What education about adult, maternity and paediatric PD is available and who can access it? • Do policy or guidelines require staff to attend this education? • What percentage of staff have received this education and in what areas? • Have all staff completed resuscitation training? • Does the education on the use of the AVSC provide sufficient information, including on the early warning score? • Have specific staff been identified to undertake advanced education (eg, advanced life support or similar). If yes; who has been chosen and why? • How does orientation include education around PD? • Is PD part of clinical generic or area-specific education? • Is PD part of ongoing mandatory training? 	
2	<p>Education – Kōrero mai</p> <p>Evidence options Education plan</p>	<ul style="list-style-type: none"> • How does the organisation deliver education about Kōrero mai or another patient escalation 	

	Component	Suggested questions	Comments/notes
	Learning resources Toolkit	<p>process to staff (eg, at induction, orientation and regular sessions)?</p> <ul style="list-style-type: none"> • Do policy or guidelines require staff to attend this education? • What percentage of staff have received this education and in what areas? • How are staff, patients and whānau informed about how patient and whānau concern is part of the escalation of care process? 	
3	<p>Education – SGoC</p> <p>Evidence (examples) Education package/content about SGoC principles, process and documentation Education provided about cultural safety Education plans, attendance and content</p>	<ul style="list-style-type: none"> • How are staff, patients and whānau informed about SGoC? • Have all staff attended education on SGoC and cultural safety as agreed by organisational governance? • What evidence shows that education on cultural safety awareness has occurred across the organisation? • How do staff put this awareness into practice? <p>For staff</p> <ul style="list-style-type: none"> • Have you had education about facilitating and participating in SGoC discussions? • Did it include information on the SGoC principles? • Did it include using a communication tool, like the serious illness conversation guide? • Did it include cultural safety? 	

	Component	Suggested questions	Comments/notes
		<ul style="list-style-type: none"> • How has the education you received influenced your participation in SGoC discussions? • Did it include how to document discussion on the SGoC form? • Describe any highlights or points of SGoC that you apply in practice. 	

Abbreviations: AVSC = adult vital signs charts; PD = patient deterioration; SGoC = shared goals of care.

Further notes

Measurement and monitoring – essential components and tracer questions | Te ine me te aroturuki – ngā tino waehanga me ngā pātai mō te whai

	Component	Suggested questions	Comments/notes
1	Measurement and monitoring – recognition and response system Evidence options Quality and safety marker (QSM) results Ongoing audit Adverse event reports Compliments and complaints Morbidity and mortality review records Governance group meeting minutes Case reviews	<ul style="list-style-type: none"> • What measures does the organisation use to monitor the recognition and response system, including ongoing audit measures? • Are these broader than the Te Tāhū Hauora PD QSM measures? • How does the organisation collect data? • Does the data show any trends? • Who reviews and monitors the data? • Does the organisation use case reviews to monitor and improve the system? How often are these done? • How are results shared back to clinical areas? • How do these clinical areas use the results? • Have any deaths or cardiac arrests occurred without an agreed SGoC? Have these been reviewed? What is the outcome? 	
2	Measurement and monitoring – vital signs charts Evidence	<ul style="list-style-type: none"> • Did the frequency of vital signs monitoring comply with current policy? • Was the core vital signs set completed for all vital signs observations? 	

	Component	Suggested questions	Comments/notes
	<p>Review of a selection of completed adult, maternity and paediatric vital signs charts in use</p> <p>Review of related clinical notes for response documentation</p> <p>Monitoring of resuscitation occurrences</p>	<ul style="list-style-type: none"> • Was the early warning score calculated correctly for all these sets of vital signs? • Did staff make any modifications to the early warning score triggers? • If yes, did the staff member give a rationale and duration for these modifications? Did they legibly date and sign each modification and record their contact details? • Is there evidence of communication with other areas/specialties for consultation? • Where a patient is transferred to a higher level of care or returned to the operating theatre, is there clear documentation on the reason, appropriate timeframe and communication with the patient? 	
3	<p>Measurement and monitoring – adult vital signs chart (AVSC)</p> <p>Review a selection of completed AVSC in use</p> <p>Review of related clinical notes for response documentation</p> <p>Monitoring of resuscitation occurrences</p>	<ul style="list-style-type: none"> • Did the patient reach any of the defined triggers for escalation? • Were any of these triggers an EWS 6+ (orange or above)? • If yes, for these triggers, did: <ul style="list-style-type: none"> ○ escalation occur according to the escalation pathway ○ the response occur according to the pathway ○ the responder complete the required documentation (according to local policy)? 	

	Component	Suggested questions	Comments/notes
4	<p>Measurement and monitoring – maternity vital signs chart (MVSC)</p> <p>Evidence options</p> <p>Review of a selection of completed MVSC in use</p> <p>Review of related clinical notes for response documentation</p> <p>Monitoring of resuscitation occurrences</p>	<ul style="list-style-type: none"> • Were any of these triggers a MEWS 5+ (orange or above)? • If yes, for these triggers, did: <ul style="list-style-type: none"> ○ escalation occur according to the escalation pathway ○ the response occur according to the pathway ○ the responder complete the required documentation (according to local policy)? 	
5	<p>Measurement and monitoring – paediatric vital signs charts (PVSC)</p> <p>Evidence options</p> <p>Review of a selection of completed PVSC in use</p> <p>Review of related clinical notes for response documentation</p> <p>Monitoring of resuscitation occurrences</p>	<ul style="list-style-type: none"> • Did the patient reach any of the defined triggers for escalation? • Were any of these triggers a PEWS 4+? • If yes, for these triggers, did: <ul style="list-style-type: none"> ○ escalation occur according to the escalation pathway ○ the response occur according to the pathway ○ the responder complete the required documentation (according to local policy)? 	
6	<p>Measurement and monitoring – Kōrero mai</p> <p>Evidence options</p> <p>Case studies – review of escalation cases</p>	<ul style="list-style-type: none"> • How do you measure and monitor the response to patient and whānau concerns about PD? • What have the results of this measurement and monitoring shown? 	

	Component	Suggested questions	Comments/notes
	Measurement and monitoring reviews Audit results		
7	Measurement and monitoring – SGoC Evidence (example) Number of patients with documented SGoC discussions	<ul style="list-style-type: none"> • How is the organisation monitoring SGoC? • Does monitoring include: <ul style="list-style-type: none"> ○ information available for patients and whānau ○ education for staff ○ whether debrief or other reflective learning processes are in place ○ whether evidence shows support processes are in place for clinicians ○ whether evidence shows support processes are in place for patients and whānau? • What measures is the organisation collecting and reporting? 	

Abbreviations: AVSC = adult vital signs charts; EWS: early warning score; MEWS = maternity early warning system; MVSC = maternity vital signs charts; PD = patient deterioration; PEWS = paediatric early warning system; PVSC = paediatric vital signs charts; QSM = quality and safety marker; SGoC = shared goals of care.

Further notes

Quality improvement – essential components and tracer questions | Whakapai kounga – ngā tino waehanga me ngā pātai mō te whai

	Component	Suggested questions	Comments/notes
1	Quality improvement – PD Evidence options Project plans PDSA (plan–do–study–act) cycles Action plans Meeting minutes Board reports	<ul style="list-style-type: none"> • What measures does the organisation use to monitor the recognition and response system? • Are these broader than the Te Tāhū Hauora PD QSM measures? • What evidence is there that measurement of the system has driven quality improvement? • Do regular case reviews occur? If yes, what are the outcomes? • How are results from measurement shared back to clinical areas? • How do these clinical areas use the results to inform improvements? 	
2	Quality improvement – adult Evidence options Any quality improvement activities or projects Case reviews Morbidity and mortality meeting outcomes Patient compliments and complaints	<ul style="list-style-type: none"> • Have any issues been identified with the adult recognition and response system in your organisation? • Has the organisation undertaken specific quality improvement activities to improve compliance with, response to and outcomes of the system? Examples include: education on using the escalation pathway and modification box; education on adding up early warning scores; focusing on specific vital sign observations that are not completed, such as respiration rate; and review of escalation pathway timeframes. 	

	Component	Suggested questions	Comments/notes
		<ul style="list-style-type: none"> • What have been the outcomes of any such activities? 	
3	Quality improvement – maternity Evidence options Quality improvement activities or projects Case reviews Morbidity and mortality meeting outcomes Patient compliments and complaints	<ul style="list-style-type: none"> • Have any issues been identified with MEWS in your organisation? • Has the organisation undertaken specific quality improvement activities to improve compliance with, response to and outcomes of the system? Examples include: education on using the escalation pathway and modification box; education on adding up early warning scores; focusing on specific vital sign observations that are not completed, such as respiration rate; and review of escalation pathway timeframes. • What have been the outcomes of any such activities? 	
4	Quality improvement – paediatric Evidence options Quality improvement activities or projects Case reviews Morbidity and mortality meeting outcomes Patient compliments and complaints	<ul style="list-style-type: none"> • Have any issues been identified with PEWS in your organisation? • Has the organisation undertaken specific quality improvement activities to improve compliance with, response to and outcomes of the system? Examples include: education on using the escalation pathway and modification box; education on adding up early warning scores; focusing on specific vital sign observations that are not completed, such as respiration rate; and review of escalation pathway timeframes. • What have been the outcomes of any such activities? 	

	Component	Suggested questions	Comments/notes
4	Quality improvement – Kōrero mai Evidence options Evaluation/review of any escalations that patients and whānau initiated Review and recommendations from adverse events	<ul style="list-style-type: none"> • Has your organisation made any changes in response to complaints/incidents, with the aim of improving escalation of concerns by patients and whānau? • How does the organisation review the patient and whānau escalation process and what have been the outcomes? 	
5	Quality improvement – SGoC Evidence (examples) Feedback from patients and whānau Staff awareness of requirements Project plans, PDSA cycles, improvement initiatives	<ul style="list-style-type: none"> • Has your organisation introduced SGoC? • If yes, do any data or trends provide opportunity for improvement? • If your organisation has not yet introduced SGoC, do you have an opportunity to do so in your area and has any planning for implementation occurred? 	

Abbreviations: MEWS = maternity early warning system; PD = patient deterioration; PDSA = plan–do–study–act; PEWS = paediatric early warning system; SGoC = shared goals of care.

Further notes

Staff awareness – essential components and tracer questions | Te tūoho o ngā kaimahi ngā tino waehanga me ngā pātai mō te whai

	Component	Suggested questions	Comments/notes
1	<p>Staff awareness – PD</p> <p>Evidence options</p> <p>Individual staff and group feedback (eg, in ICU, high-dependency unit, coronary care unit, paediatrics, mental health, medical/surgical wards, rural hospital/satellite site)</p> <p>Staff spoken to should include:</p> <ul style="list-style-type: none"> • charge nurse manager or equivalent • doctors and/or anaesthetists of different levels • nurse educators • nurse practitioners • registered nurses (sample) • duty nurse manager/coordinator • patient-at-risk nurses or equivalent • other staff as available: <ul style="list-style-type: none"> ○ allied health ○ enrolled nurses. 	<p>For staff generally</p> <ul style="list-style-type: none"> • Do you have a process for identifying the deteriorating patient? • What tools are available to you to help you identify deteriorating patients? • Have you had education on the use of these tools? • If a patient deteriorates, is your role to be recogniser or responder (primary, secondary or tertiary)? • How much do your colleagues support your decision to escalate care during day shifts and after hours? • When care is escalated, how often do responders arrive within the timeframe set out in the escalation pathway? Does this differ between day shifts and working after hours? • How do you act on and document patient and whānau concerns about the patient's deteriorating condition? • How do you act on a patient's SGoC if they deteriorate? 	

Component	Suggested questions	Comments/notes
	<ul style="list-style-type: none"> • How does the recognition and response system support you to seek help for patients you are worried about? • Are you notified about a deteriorating patient within the timeframe set in the agreed escalation pathway? • How do you seek help if a patient deteriorates – especially out of hours and during the night or weekend? • Do you get feedback if a patient in your care has a medical emergency team or 777 call, has a cardiac arrest or is transferred to a higher level of care? • What documentation is there for transferring a patient to a higher level of care? • Who takes the lead in the decision-making about transfer to a higher level of care? • What feedback can you give about your experience of recognising and responding to deteriorating patients? • Describe the process of managing the transfer of deteriorating patients into, within and out of the hospital. <p>For staff in mental health areas</p> <ul style="list-style-type: none"> • What documentation is used with EWS monitoring? 	

	Component	Suggested questions	Comments/notes
		<ul style="list-style-type: none"> • What is the process for escalation of concern? • Who responds in-hours and who responds after hours? • How is the management of escalation reviewed and monitored? • What governance is in place? 	
2	Staff awareness – MEWS Evidence options Staff feedback	For staff in non-maternity areas (in addition to questions similar to the PD component above) <ul style="list-style-type: none"> • Are you familiar with MEWS? • Do you know when you should use the MVSC? • How do you escalate care, and who to, if a patient on an MVSC recording requires escalation? For staff in maternity areas (in addition to questions similar to the PD component above) <ul style="list-style-type: none"> • Are you familiar with MEWS? • What feedback can you give about your experience of MEWS? 	
3	Staff awareness – PEWS Evidence options Staff feedback	For staff in paediatric areas (in addition to questions similar to the PD component above) <ul style="list-style-type: none"> • Are you familiar with PEWS? • What feedback can you give about your experience of PEWS? 	

	Component	Suggested questions	Comments/notes
4	<p>Staff awareness and feedback – Kōrero mai</p> <p>Evidence options Pathway flow chart Posters Orientation plan Online tools Staff feedback (should include after-hours duty nurse manager or person responsible for response to escalations)</p>	<ul style="list-style-type: none"> • Is an escalation process for concerns about PD available to patients and whānau? • How does the process work? • How do patients and whānau know about the process? • Who responds when a patient or whānau raises concerns? • Is the response appropriate and effective? 	
5	<p>Staff awareness and feedback – SGoC</p> <p>Evidence (examples) Staff feedback indicates evidence of considering options Evidence of efforts to provide privacy and dignity Staff awareness of key aspects of SGoC Feedback from clinicians reflects commitment to shared understanding Medical staff awareness of option to include members of multidisciplinary team</p>	<ul style="list-style-type: none"> • Who coordinates SGoC discussions in your area? • Who facilitates the discussion? • Who is included in the discussion? • What actions do you take to support the privacy and dignity of patients and whānau during SGoC discussions? • How do you incorporate cultural safety into your SGoC discussions? • How do you incorporate a patient's advance care plan into the discussion? • Where do you document the SGoC discussion and agreements? • How do you act on a patient's SGoC if they deteriorate? 	

	Component	Suggested questions	Comments/notes
	All members of multidisciplinary team aware of SGoC process, including setting up, facilitation and documentation requirements		

Abbreviations: EWS: early warning score; ICU = intensive care unit; MEWS = maternity early warning system; MVSC = maternity vital signs charts; PD = patient deterioration; SGoC = shared goals of care.

Further notes

Patient and whānau awareness – essential components and tracer questions | Te tūoho o ngā tūroro me ngā whānau - ngā tino waehanga me ngā pātai mō te whai

	Component	Suggested questions	Comments/notes
1	<p>Patient and whānau awareness – adult or maternity (if an escalation event has occurred)</p> <p>Evidence options Patient and whānau feedback</p>	<ul style="list-style-type: none"> You recently became more unwell during your time in hospital. Do you remember this? What happened? Do you feel staff told you about this in a way that helped you understand what had happened? What other feedback about your experience can you give? 	
2	<p>Parent/caregiver awareness – paediatric (if an escalation event has occurred)</p> <p>Evidence options Parent/caregiver feedback</p>	<ul style="list-style-type: none"> Your child recently became more unwell during their time in hospital. Do you remember this? What happened? Do you feel staff told you about this in a way that helped you understand what had happened? What other feedback about your experience can you give? 	
3	<p>Patient and whānau awareness – Kōrero mai</p> <p>Evidence options Patient information Posters/pamphlets</p>	<p>For patients</p> <ul style="list-style-type: none"> If you felt that you were becoming more unwell, or were concerned about a change in your condition, what would you do to get help? <p>For whānau</p> <ul style="list-style-type: none"> If you felt that your whānau member was becoming more unwell, or you were concerned 	

		<p>about a change in their condition, what would you do to get help?</p> <p>For patients and whānau</p> <ul style="list-style-type: none"> • Who would you talk to if you needed to get help? • If the ward team did not respond to your concerns, what would you do next? 	
4	<p>Patient and whānau awareness – SGoC</p> <p>Evidence (examples)</p> <p>Feedback from patients and whānau reflect:</p> <ul style="list-style-type: none"> • discussion about values and what is important to them • shared understanding. 	<ul style="list-style-type: none"> • Have you had a discussion with staff about the overall goal of your care during this hospital admission? • Can you describe the discussion? • Did this discussion cover your values and what is important to you? • Does someone have EPoA for you? If so, were they involved in the discussion? • Do you have an advance care plan? Were you able to use it during your discussion with staff about your goals of care? • Do you have a living will or health directive? If so, have you brought it with you to hospital and have you discussed it with staff? • Do you feel that this discussion led to a shared decision about your goals of care for this admission? 	

Abbreviations: EPoA – enduring power of attorney; SGoC – shared goals of care.

Further notes

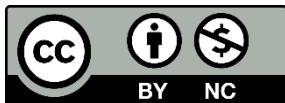
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