Health Quality & Safety Commission New Zealand
Kupu Taurangi Hauora o Aotearoa

Maternal Morbidity Working Group

Maternal morbidity review toolkit for maternity services | Te kete arotake mate whakawhānau mō ngā ratonga whakawhānau

A foundational document | He pukapuka pūtake

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- Northland DHB for the opportunity to modify its actions template as a resource in this toolkit.

The toolkit will be reviewed in November 2021.

Document purpose | Take o te pukapuka

This document is part of the Health Quality & Safety Commission's maternal morbidity review toolkit.

The review toolkit has been developed by the Commission's Maternal Morbidity Working Group to provide maternity services with clear, easy-to-use, evidence-based guidance and resources for implementing a consistent process for review of cases of significant maternal morbidity.

This document:

- sets the foundation for the review toolkit, providing the evidence and rationale for its development
- sets out recommended principles and a suggested process for establishing local morbidity review within a DHB or private maternity service
- introduces the various components and resources included in the review toolkit.

Contents | Rārangi take

1 Background | Kōrero whakatakoto

1.1 The Maternal Morbidity Working Group

The Maternal Morbidity Working Group (MMWG) was established in May 2016 under the umbrella of the Health Quality & Safety Commission's Perinatal and Maternal Mortality Review Committee (PMMRC). The MMWG's role is to review and report on maternal morbidity, and to develop quality improvement initiatives to reduce maternal morbidity and improve maternal outcomes.

The MMWG also provides clinical governance for maternal morbidity review at a national level and has worked alongside maternity services to improve local maternal morbidity reviews.

1.2 Definition of maternal morbidity

Severe acute maternal morbidity (also known as maternal 'near miss') is when a pregnant or recently pregnant woman is very ill and 'would have died had it not been luck or good care was on her side'.[1] Maternal morbidity rates are used alongside maternal mortality as a measure of the responsiveness and quality of maternity care.

While events of maternal morbidity are rare, the impact on the woman and on her family and whānau, and on the clinicians[2] who provided her care, are often profound.

1.3 Definition of maternal morbidity review

Maternal morbidity reviews are quality improvement initiatives that allow teams to identify ways to improve systems and processes to reduce maternal morbidity. Through reviews, maternity teams learn, share and understand issues to minimise future cases of maternal morbidity.

The New Zealand Maternity Standards[3] require that district health boards (DHBs) develop and support an ongoing systematic review process, where local multidisciplinary teams work collegially to identify ways to improve services.

Maternal morbidity reviews are in addition to the requirements set out in the National Adverse Events Reporting Policy 2017.[4] DHBs should continue to notify and review any event that is rated as a Severity Assessment Code (SAC) 1 or 2,[5] or that is on the always report and review list.[6]

1.4 Te Tiriti o Waitangi

The principles of partnership, participation and protection underpin the relationship between the Government and Māori under the Treaty of Waitangi. Maternal morbidity reviews must apply these principles:

- Partnership involves working together with iwi, hapū, whānau and Māori communities to develop strategies for Māori health gain and appropriate health and disability services.
- Participation requires Māori to be involved at all levels of the health and disability sector, including in decision-making, planning, development and delivery of health and disability services.
- Protection involves the Government working to ensure Māori have at least the same level of health as non-Māori, and safeguarding Māori cultural concepts, values and practices.

1 Mantel GD, Buchmann E, Rees H, et al. 1998. Severe acute maternal morbidity: a pilot study of a definition for a near-miss. *BJOG: An International Journal of Obstetrics & Gynaecology* 105: 985–90. DOI: 10.1111/j.1471-0528.1998.tb10262.x.

2 The use of the term 'clinicians' relates to all registered health professionals – for example, midwives, nurses and doctors.

3 Ministry of Health. 2011. *New Zealand Maternity Standards: A set of standards to guide the planning, funding and monitoring of maternity services by the Ministry of Health and district health boards.* Wellington: Ministry of Health. URL: www.health.govt.nz/publication/new-zealand-maternity-standards (accessed 15 October 2018).

4 Health Quality & Safety Commission. 2017. *National Adverse Events Reporting Policy 2017.* Wellington: Health Quality & Safety Commission. URL: www.hqsc.govt.nz/our-programmes/adverse-events/national-adverse-events-policy (accessed 15 October 2018).

5 Health Quality & Safety Commission. 2017. *Severity Assessment Code (SAC) rating and triage tool for adverse event reporting.* Wellington: Health Quality & Safety Commission. URL: www.hqsc.govt.nz/our-programmes/adverse-events/publications-and-resources/publication/2937 (accessed 15 October 2018).

6 Health Quality & Safety Commission. 2017. *Always report and review list 2018–19.* Wellington: Health Quality & Safety Commission. URL: www.hqsc.govt.nz/our-programmes/adverse-events/publications-and-resources/publication/2936 (accessed 15 October 2018).

1.5 Equity

In New Zealand, people have differences in health that are not only avoidable but also unfair and unjust. Equity recognises that different people with different levels of advantage may require different approaches to get the same outcome. In New Zealand, inequities in health and the determinants of health are pronounced. Of concern are the large and persistent inequities experienced by Māori and Pacific peoples.

Maternal morbidity reviews must consider whether inequities existed in relation to the maternal morbidity event and, if so, how the inequities occurred and how they will be addressed through the review and recommendation process.

2 Introduction to the review toolkit | Whakamōhiotanga ki te kete arotake

The MMWG has developed the review toolkit in response to the identified need for a process that provides consistency, transparency and structure. It should be integrated into the wider organisational requirements and statutory responsibility for adverse event reporting. This review toolkit will complement and inform the wider DHB quality and safety environment.

Although the review toolkit was primarily developed for DHBs, it is also suitable for use by private maternity services.

2.1 Resources in the review toolkit

We have brought together the following resources in the review toolkit:

- this foundational document
- a terms of reference template
- an example of a trigger list
- a maternal morbidity review template, which includes:
    - the case summary template
    - the maternal morbidity review tool
    - an example of an action template
- the maternal morbidity review checklist
- the Health Equity Assessment Tool.[7]

The Health Equity Assessment Tool

The Health Equity Assessment Tool (HEAT) is included to enable an equity lens to be applied to each maternal morbidity review.

HEAT aims to promote equity in health in New Zealand. It comprises 10 questions for assessing policy, programme or service interventions for the current or future impact on health inequities. HEAT is a flexible tool that can be used in its entirety or, alternatively, selected questions can be asked for specific purposes.

The HEAT is available online at www.health.govt.nz/system/files/documents/publications/health-equity-assessment-tool-guide.pdf.

7 Signal L, Martin J, Cram F, et al. 2008. *The Health Equity Assessment Tool: A user's guide.* Wellington: Ministry of Health. URL: www.health.govt.nz/system/files/documents/publications/health-equity-assessment-tool-guide.pdf (accessed 15 October 2018).

3 An overview of maternal morbidity review | Tirohanga whānui ki te arotake mate whakawhānau

3.1 Key principles for maternal morbidity review

All reviews should be undertaken sensitively, in a timely manner, and with communication and involvement of the woman and the clinicians directly involved in her care. The following key principles[8] of maternal morbidity review help to create a supportive environment.[9]

- Reviews consider the context in which the service was provided, and the focus is on learning and improvement, rather than attributing blame.
- Reviews consider the context in which the service was received, cultural safety, and the social determinants of health.
- Reviews consider whether inequities existed in the care and treatment of the woman who experienced the maternal morbidity.
- Reviews are based on evidence, and knowledge of best practice.
- Reviews will be conducted with respect and compassion to the woman, her family and whānau, and the clinicians directly involved in her care.
- Reviews and recommendations must be focused on the system, not on individuals.[10]

3.2 Responsiveness to Māori

When reviewing cases of maternal morbidity for Māori women, it is critical to acknowledge the range of Māori realities that exist. There are customary practices and protocols that, for some Māori women, will guide safe practice for them, their whānau and pēpi (baby).[11] This may include specific tikanga (correct protocol) and mātauranga (traditional knowledge). Traditionally, Māori refer to women as te whare tangata (the house of humanity), recognising the vital roles women play in providing life and nurturing future generations.

> *'Kaua e takahia te mana o te tangata.'*
>
> *'Do not trample on the mana or dignity of a person.'*
>
> – Māori Responsiveness Rubric[12]

Where the maternal morbidity review relates to a Māori woman and her whānau, it is important that their voices are heard and their realities understood. Māori have the right to experience health equity through access to high-quality health and disability services that are responsive to their needs and aspirations.

3.3 Key components of local maternal morbidity review

The key components of a local review process are:

- strong clinical governance
- a safe and fair environment
- clear communication and transparency
- a multidisciplinary review team
- comprehensive case summaries
- a holistic approach to reviews
- application and consideration of health equity principles.

8 Key principles of adverse clinical reviews presentation by Dr J Carthey, human factors and patient safety expert. Unpublished presentation.

9 Leistikow I, Mulder S, Vesseur J, et al. 2016. Learning from incidents in healthcare: the journey, not the arrival, matters. *BMJ Quality and Safety.* DOI: 10.1136/bmjqs-2015-004853.

10 System-focused recommendations are more effective and could be related to standardising care or simplifying pathways. Person-focused recommendations (eg, reminder memos) are less effective.

11 Eruera M, Ruwhiu L. 2015. "Eeny, Meeny, Miny, Moe" catch hegemony by the toe: validating cultural protective constructs for indigenous children in Aotearoa. In Fejo-King C, Mataira P (eds). *Expanding the conversation: International indigenous social workers' insights into the use of Indigenist knowledge and theory in practice.* Canberra: Magpie Goose Publishing.

12 Mortality Review Committees Māori Caucus. 2017. *Māori Responsiveness Rubric.* Unpublished. Wellington: Health Quality & Safety Commission.

3.4 The local review process

The process map in Figure 1 demonstrates how to conduct a local review. The map has two parts:

1. identification and notification of the event, preparation of the case for review and the review meeting
2. the core components following the review process.

The MMWG recommends printing this document and displaying it in the maternity service to promote reviews and maintain transparency of the review process. A large (A3), printable version can be downloaded from www.hqsc.govt.nz/our-programmes/mrc/pmmrc/publications-and-resources/publication/3512.

Maternal morbidity review

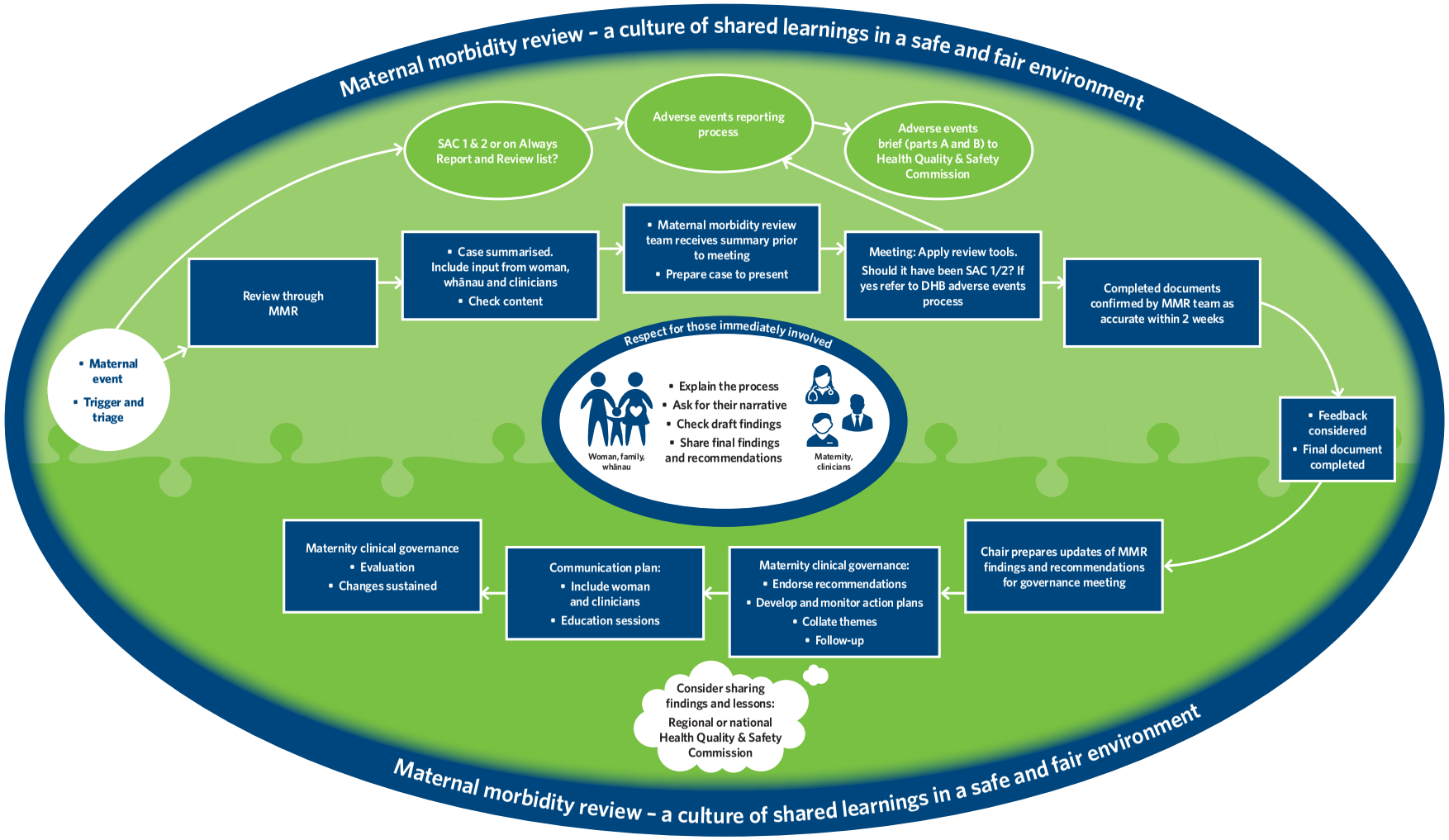

Figure 1: Maternal morbidity review process map

Maternal Morbidity Working Group

www.hqsc.govt.nz/our-programmes/mrc/pmmrc/maternal-morbidity-and-mortality-information/mmwg

newzealand.govt.nz

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4 Establishing a review process in your maternity service | Te whakatū i tētahi hātepe arotake ki tō ratonga whakawhānau

4.1 Governance

Implementing a quality review process requires buy-in and strong leadership from a clinical governance committee that shares responsibility and accountability for providing quality care, equitable outcomes, improving services and fostering a safe culture and an environment of excellence.

Immediate governance for the maternal morbidity review process should become a standing item on the already-established maternity clinical governance committee. This committee will likely have a reporting line to the wider hospital clinical governance committee, such as the clinical board or the executive leadership team.

In the context of case review, the clinical governance committee is responsible for:

- ensuring that the review process is embedded within the maternity service
- ensuring there is adequate resource for the coordination and administration of review meetings, and for clinician attendance at those meetings
- developing and approving the terms of reference for case reviews – these include meeting protocol, confidentiality responsibilities, and the roles and responsibilities of the chair and members. An example terms of reference document is included as a resource in this toolkit (see Appendix 2)
- reviewing and endorsing the recommendations, delegating actions, monitoring the implementation of the recommendations, evaluating the outcomes and ensuring sustainability
- ensuring equity is considered throughout the review process – specifically, ensuring that review panels consider any inequities that exist in relation to the maternal morbidity event, and that they consider the future impact of the recommendations on health inequity
- providing necessary updates to relevant groups (eg, executive leadership or clinical board) and escalating any issues or concerns.

4.2 A culture of shared learnings in a safe and fair environment

A safe environment is one of trust and reciprocity; it contains a willingness to understand and appreciate the other's view. A safe environment focuses on systems issues or structural barriers that lead individuals to unsafe behaviours rather than on individual blame. It is transparent and recognises that everyone has a part to play in leading a culture of safety for both the women and the maternity workforce.

Equity

The review must be mindful that, in New Zealand, inequities in health, and in the determinants of health, are pronounced. Of concern are the large and persistent inequities experienced by Māori. In practice, this means each maternal morbidity review should use HEAT to identify any inequities that may have contributed to the maternal morbidity event.

Acknowledging the complexity of maternity services

The review team needs to be mindful of the complexity of the maternity service environment. The clinicians providing clinical care (work-as-done), where work is complicated, unpredictable and uncertain, have a different understanding to those removed from day-to-day delivery of care, who may have a more linear view of work-as-imagined.[13] The best way to address these differences is to create an environment that allows discussion to accommodate different professional worldviews.[14]

13 Braithwaite J, Clay-Williams R, Hunte G, et al. 2017. Understanding resilient clinical practices in emergency department ecosystems. In Braithwaite J, Wears R, Hollnagel E (eds). *Resilient Health Care: Reconciling work-as imagined and work-as-done.* Boca Raton, FL: Taylor and Francis.

14 American College of Healthcare Executives and IHI/NPSF Lucian Leape Institute. 2017. *Leading a Culture of Safety: A blueprint for success.* URL: www.npsf.org/page/cultureofsafety (accessed 15 October 2018).

Awareness and transparency

The clinical governance committee plays an important role in ensuring that staff are familiar with the review process, and that the process is transparent. The MMWG recommends that maternity services establish a process to ensure that new employees and lead maternity care (LMC) access holders receive a copy of the review process and can discuss and understand expectations.

4.3 Education and development

An important component of successful review is building knowledge of review processes and increasing the capability of clinicians and consumers. The Health Quality & Safety Commission offers supportive information through *From knowledge to action: A framework for building quality and safety capability in the New Zealand health system*.[15]

The members of the MMWG regional panels, the midwifery educator, the maternity quality and safety programme coordinator and the wider DHB quality and safety team are all excellent resources. In addition, we provide regular adverse event workshops, plus a range of resources, tools and templates. For further information, go to the adverse events section of our website.[16]

Consumers on the review team should be supported and empowered to actively participate. We have developed two information sheets – *New consumer representatives: three tips for chairs*[17] and *Tips for new consumer representatives*[18] – which are available on the Commission's Partners in Care web page.[19] Our guide to help DHBs engage better with consumers is also available online.[20]

Neighbouring DHBs, or other private maternity services, may also provide the opportunity for education and professional development.

Smaller maternity services should consider working in partnership with larger services to support a neutral lens and to reduce bias. This also promotes collaboration.

4.4 Creating a review team

Membership

The review team will be multidisciplinary and include representation of the woman's worldview. Members could include:

- a hospital midwife
- an LMC representative
- an obstetrician (may or may not be the clinical director)
- a charge midwife
- the maternity quality and safety coordinator, who has links to the wider DHB quality and safety team
- an experienced maternity consumer
- a Māori consumer
- representatives of other ethnicities.

15 Health Quality & Safety Commission. 2016. *From knowledge to action: A framework for building quality and safety capability in the New Zealand health system.* Wellington: Health Quality & Safety Commission. URL: www.hqsc.govt.nz/our-programmes/improving-leadership-and-capability/publications-and-resources/publication/2669 (accessed 15 October 2018).

16 www.hqsc.govt.nz/our-programmes/adverse-events

17 Health Quality & Safety Commission. 2015. *New consumer representatives: three tips for chairs.* Wellington: Health Quality & Safety Commission. URL: www.hqsc.govt.nz/assets/Consumer-Engagement/Resources/tips-for-consumer-group-chairs-Aug-2015.pdf (accessed 15 October 2018).

18 Health Quality & Safety Commission. 2015. *Tips for new consumer representatives.* Wellington: Health Quality & Safety Commission. URL: www.hqsc.govt.nz/assets/Consumer-Engagement/Resources/Tips-for-consumers-representatives-Aug-2015.pdf (accessed 15 October 2018).

19 www.hqsc.govt.nz/our-programmes/partners-in-care/

20 Health Quality & Safety Commission. 2015. *Engaging with consumers: a guide for district health boards.* Wellington: Health Quality & Safety Commission. URL: www.hqsc.govt.nz/our-programmes/partners-in-care/publications-and-resources/publication/2162 (accessed 15 October 2018).

Some cases may require or benefit from additional team members being included to offer a wider or different perspective. Examples of other members include:

- an anaesthetist (for cases involving either neuraxial analgesia or a visit to an operating theatre)
- an intensivist (for high dependency unit or intensive care unit cases)
- a paediatrician or neonatologist (for cases involving neonatal morbidity or mortality)
- an obstetric physician
- a general practitioner
- a human factors expert
- specialties relevant to the case, such as radiology, allied health, paediatrics and/or social work
- representatives from external agencies (eg, paramedics).

Cultural safety

The MMWG recognises the importance of culturally safe processes for Māori and Pacific peoples and people of other ethnicities when they engage in local maternal morbidity reviews. It is the responsibility of all the members of the review team to ensure cultural safety. In addition, we encourage appropriate cultural representation on the review team to help address the physical, social, emotional and spiritual wellbeing of all concerned.

Māori and Pacific health membership helps to make the review culturally appropriate. This can help to reduce inequity and institutional racism by presenting different worldviews.

Roles and resources

Clinician time: Reviewing cases of maternal morbidity requires a time commitment from clinicians, both to prepare for the review meeting and to attend the review meeting.

Each case will take approximately 45–60 minutes to review (at the meeting), plus preparation time. Every clinician who attends will need to read the case summaries before attending the meeting. Some team members will also need to prepare a five-minute synopsis of a case to present.

Chair: The chair manages the discussion, ensures that all members contribute and are heard, and supports the review team to reach consensus. The chair plays a key role in ensuring that the review team focuses on systems and processes, and considers whether inequities were a factor in the maternal morbidity event. The chair confirms the final review findings and recommendations following feedback, and ensures they are tabled at the clinical governance meeting.

Coordinator role: The coordinator plans and organises the review meetings. The coordinator is responsible for working with established maternity clinical leads (eg, director of midwifery) to triage the cases for review, and for arranging the attendance of additional clinical expertise or records (eg, renal surgeon or cardiologist records). The coordinator is also responsible for recording the findings from the meeting, and maintaining a database of findings, recommendations and any follow-up actions.

Case summariser: The case summariser is responsible for summarising the complete maternity record to provide the information needed to understand the case and the timeline of care.

The case summariser may be a dedicated role, or they may be a member of the review team.

It is vital that the case summariser has a good understanding of the inequities in health care and outcomes, and that they consider equity in the case summaries. The case summariser should consider whether inequalities existed in relation to the maternal morbidity event, including how these may have occurred and/or impacted the outcomes for the woman.

Key contact person(s): The key contact person(s) is the designated person responsible for liaising with the woman and the clinicians directly involved in her care. This can be the same person, or different people.

When selecting the key contact person, it is crucial to consider who is best placed to contact the woman, and to support her and her family and whānau through the process. Consumer advocates or Māori and Pacific teams may have culturally safe engagement skills that are critical at this point.

Financial implications

All case reviews require financial resource, whether it is through the release of staff to participate in reviews, or through additional wages for certain roles (eg, a coordinator).

DHBs should also remunerate members of the review team who are not employed by the maternity service (eg, LMCs, general practitioners and consumers). Each DHB (and maternity service) should have a policy for consumer remuneration, which could be applied to non-employed clinicians to provide a fair and transparent environment.

4.5 Identifying cases for review

A review should be initiated following an event that meets **any of the following** three categories.

1. The event is rated as SAC 3 or SAC 4.
2. The event is on the always report and review list – for example:
    a. unplanned admission to the high dependency unit or intensive care unit, or receiving high dependency care in the birthing unit (delivery suite)[21]
    b. women who receive four or more units of blood
    c. an event that falls within national review requirements (eg, requirements set by the National Maternity Monitoring Group).
3. The event is specified in a local trigger list. Trigger lists are developed locally in response to maternity service trends or clinical indicators. These are reviewed annually and are receptive to national priorities. Examples of triggers are third or fourth degree tears, sepsis, venous thromboembolism or admission of a baby requiring cooling. An example of a full trigger list is included as a resource in the review toolkit (see Appendix 2).

If an event is rated as SAC 1 or 2, it will need to be reviewed in line with the DHB's adverse events policy. Some DHBs will have a specific review process that will need to be followed. In this case, follow the DHB-set process, but ensure the review methodology reflects the principles of this toolkit.

The SAC rating of an event may change at the end of a review meeting, for example, if the team decides an event originally rated as SAC 3 or 4 meets the criteria for SAC 1 or 2. This will trigger the DHB to review the case in line with its adverse events policy for SAC 1 and 2 rated events. In this case, the findings from the initial maternal morbidity review should contribute to and inform a more detailed review.

21 Some clinical settings have a number of high dependency beds rather than an entire unit.

5 Before the review | I mua i te arotake

5.1 Case summaries

Case summaries are crucial to the review process because they provide sufficient information for review team members to understand the case, and the timeline of care. A case summariser should summarise the complete maternity record, including primary maternity records from the LMC or the woman.

Including the complete record allows the review team to understand the woman's entire pregnancy journey, including all engagements with health services, to optimise maternity care and outcomes.[22]

As well as gathering information from clinical notes, gathering contextual information about a woman's care can be beneficial. Contextual information may include details about the care setting at the time of care, and human factors. For example:

- scheduling information (staffing levels, acuity and mix)
- training (eg, to use new equipment)
- rules, policies and procedures
- communication
- environment (eg, acuity at the time).

Contextual information also allows the review team to apply an equity lens, to identify where and when inequities may have impacted a woman's maternal morbidity event, care and outcomes.

Case summaries are completed before the review meetings, and with enough time for the coordinator to seek input from the woman and the clinicians directly involved in her care.

5.2 Information gathering

Women's narratives

The MMWG recommends that women should be offered the opportunity to be involved with, and contribute to, the review process. Including the woman's narrative is critical to the review team because it provides an opportunity for the team to consider a range of factors that may have contributed to the woman's morbidity, across her whole pregnancy.[23]

Offering a woman the opportunity to share her narrative allows her to tell of her experience, and share her memories, thoughts, perceptions and reflections – all of which form her reality of the event.

Women should be given the opportunity to:

- provide their account of events
- raise questions they would like addressed at the review (even if they were not directly involved in the event itself)
- ensure the content of the summary reflects their experience of the event
- provide feedback on the review findings
- respond to the maternity clinical governance committee's recommendations and actions directly related to the case.

Before contacting the woman, it is important to think critically about who is best placed to make first contact. It may or may not be the LMC. Consumer advocates or Māori and Pacific teams may have culturally safe engagement skills that are critical at this point. For some women, it may be too difficult or

22 Vincent C, Amalberti R. 2015. *Safer Healthcare: Strategies for the Real World.* Oxford: Springer Open. URL: https://link.springer.com/content/pdf/10.1007%2F978-3-319-25559-0.pdf.

23 *Ibid*.

traumatic. In all cases, take great care when approaching women about a review of maternal morbidity — be sensitive of the potential complication of post-traumatic stress disorder (PTSD).

If the woman decides to participate, the key contact will work with her to maximise the opportunities to contribute. Of course, women have the right to turn down this opportunity; however, if a woman later changes her mind, she must know how to, and be able to, get in touch with the key contact.

When notifying the woman of the review, make sure she understands the process, and that the review is not about attributing blame, but rather about the opportunity to learn and reduce the potential of future harm. Some women may want to place a complaint. If so, explain to them the organisation's complaint process and/or direct them to the Ministry of Health's website, which lists the options available for concerns about maternity care.[24]

If a woman decides to participate in a review, she must be able to select how she wants to share her experience. It could be typed, recorded and transcribed over the phone or face-to-face, or written on her behalf. If it is face-to-face, this should be in a setting of her choice supported by whomever she chooses to be there. When sharing findings and recommendations with the woman, be sure to do it in a way that allows her to provide meaningful feedback.

Throughout the review process, be mindful and aware of the woman's wellbeing. Explain the support services that are available to her, and offer to make appropriate referrals.

Clinicians' views

All clinicians directly involved in a case for review should have opportunities to be included in the review process. They should also be given the opportunity to:

- provide their account of events
- raise questions they would like addressed at the review (even if they were not directly involved in the event itself)
- ensure the content of the case summary reflects their experience of the event
- provide feedback on the review findings
- respond to the maternity clinical governance committee's recommendations and actions directly related to the case.

When contacting clinicians, reassure them that the aim of the review is not to attribute blame, but rather to improve systems and processes to reduce similar occurrences in future. This recognises and acknowledges that most errors are not caused by individual clinician failure but are usually the results of complex systems that create environments of risk.[25]

As well as providing valuable insight, hearing the clinician's views can provide an opportunity to support them through the aftermath of a severe event. This is recognised as an important component in establishing a safe and fair culture; it can increase workforce stability and reduce the 'second-victim' phenomenon.[26]

To further support clinicians, the MMWG recommends that DHBs consider creating a multidisciplinary peer support programme, where clinicians can seek counsel and support following an event.[27] Additional information about peer support is available from the Commission's website with links to the Auckland DHB's critical incident e-book, (chapter 3 covers seeking support), and the New Zealand College of

24 www.health.govt.nz/your-health/pregnancy-and-kids/services-and-support-during-pregnancy/if-youre-unhappy-your-care

25 American College of Healthcare Executives and IHI/NPSF Lucian Leape Institute. 2017. *Leading a Culture of Safety: A blueprint for success.* URL: www.npsf.org/page/cultureofsafety (accessed 15 October 2018).

26 Kelly N, Blake S, Plunkett A. 2016. Learning from excellent in healthcare: a new approach to incident reporting. Archives of Diseases in Childhood 101(9): 788–91. DOI: 10.1136/archild-2015-310021.

27 Edrees H, Connor C, Paine L, et al. 2016. Implementing the RISE second victim support programme at the Johns Hopkins Hospital: a case study. *BMJ Open 6*: e011708. DOI: 10.1136/bmjopen-2016-011708.

Midwives' unexpected outcome information booklet.[28] The Irish Health Service Executive also provides excellent guidance about how to support staff after an event in their *Supporting Staff following an adverse event - The 'ASSIST ME' model.*[29]

5.3 Team member preparation

Case summaries (including the woman's narrative, if available) are provided to each review team member in advance of the review meeting. All members should read the summaries to familiarise themselves with the cases before they are reviewed.

For each case, a team member is responsible for reading through the woman's full clinical file (as well as the case summary) and presenting a five-minute synopsis at the meeting. Note that access to the clinical file will be in line with DHB policy – that is, the team member may not remove it from the site.

28 www.hqsc.govt.nz/our-programmes/mrc/pmmrc/maternal-morbidity-and-mortality-information/mmwg

29 Health Service Executive. 2013. *Supporting staff following an adverse event: The 'ASSIST ME' model.* Naas: Health Service Executive. URL: www.hse.ie/eng/about/Who/QID/Other-Quality-Improvement-Programmes/opendisclosure/opendiscFiles/bookletSuppStaffadverseevent.pdf (accessed 28 September 2017).

6 During the review | I te wā o te arotake

6.1 Using the maternal morbidity review tool

This toolkit includes a modified version of the tool used by the Perinatal and Maternal Mortality Review Committee, which is based on the London Protocol.[30] The review tool, which is available to download in Appendix 2, supports teams to identify a range of factors that may have affected care and directly or indirectly contributed to the event/severity of morbidity.

At the review meeting, the team uses the tool to identify relevant factors and the coordinator completes the review tool form, which then becomes the summary of the findings.

Once the range of factors are identified, the review team evaluates them to determine whether the event/severity of morbidity was potentially avoidable. The review team may determine that an event/severity of morbidity was potentially avoidable because:

a) factors that may have **contributed** to the deterioration of the woman's condition or the severity of her morbidity were **present**

   or

b) factors that could have **prevented** the deterioration of the woman's condition/severity of morbidity were **absent**.[31, 32]

Identifying and naming these factors allows the review team to develop recommendations. These recommendations should be focused on reducing/eliminating the negative factors and promoting/ensuring positive factors.

6.2 Supporting a holistic review

During the review, teams should not only consider the factors that impacted care within the health care setting or maternity service, but also the wider social determinants that can impact outcomes.

Social determinants, such as living conditions, are a significant cause of inequity in the health and wellbeing of New Zealand's maternity population. That is, they shape the wellbeing of women and their families and whānau, and influence their pregnancy and outcomes. The review team needs to consider factors that impacted on the continuum of maternity care at individual, societal and health systems levels.[33]

We encourage the panel to apply HEAT during the review meeting (in particular, questions 1–3) to consider whether inequities existed in the woman's care, how and why these were created and maintained, and how they could have been reduced. The panel should consider how the health services may have contributed to any inequities, as well as how they may have contributed to reducing inequities.

6.3 Developing recommendations

The purpose of recommendations is to make a tangible difference to the women accessing maternity services (their care and outcomes) and the clinicians who provide care.

Evidence suggests that the most effective recommendations are focused on system change and system factors rather than on human factors. For example, implementing forced fittings and coloured lines to prevent errors in epidural administration would be a more effective recommendation than training and education about how to avoid epidural administration errors.

30 Vincent C, Amalberti R. 2015. *Safer Healthcare: Strategies for the Real World.* Oxford: Springer Open. URL: https://link.springer.com/content/pdf/10.1007%2F978-3-319-25559-0.pdf

31 Masson V, Farquhar C, Sadler L. 2016. Validation of local review for the identification of contributory factors and potentailly avoidable deaths. *Australian and New Zealand Journal of Obstetrics and Gynaecology* 56(3): 1–7. DOI: 10.1111/ajo.12454.

32 MacDonald E, Geller S, Lawton B. 2016. Establishment of a national severe maternal morbidity preventability review in New Zealand. *International Journal of Gynecology and Obstetrics* 135(1): 120–3. DOI: 10.1016/j.ijgo.2016.03.034.

33 Quintanilla B, Taft A, McDonald S, et al. 2016. Social determinants and maternal exposure to intimate partner violence of obstetric patients with severe maternal morbidity in the intensive care unit: a systematic review protocol. *BMJ Open* 6(11): e013270. DOI: 10.1136/bmjopen-2016-013270.

When developing recommendations, teams must consider how the recommendations may affect health inequalities and inequities. HEAT can be used to assess recommendations for their future impact on health equity (in particular, questions 4–8).

Recommendations should also be SMART: specific, measurable, achievable, realistic and timely.

If individual error is identified and corrective action is necessary, review teams must ensure the recommendations are fair and sustainable. The MMWG recommends that review teams use the SafetySteps model[34] for developing robust correction action plans.

It is important to record the findings, lessons learned, recommendations and any actions from the review meetings so progress can be monitored and evaluated to sustain change. If the DHB or maternity service does not have an established process to follow, there is an example action template included in the review toolkit for the clinical governance committee to use (see Appendix 2).

While the review team is responsible for recording the findings and recommendations, they are not responsible for their implementation and monitoring. This is the responsibility of the clinical governance committee.

34 Christensen D, Soo M. 2016. Introduction of an evidenced based approach to formulate robust corrective action plans following serious events. URL: http://koawatea.co.nz/wp-content/uploads/2016/03/6ICEGE-PAPERS-apac15final00593.pdf (accessed 31 October 2018).

7 After the review | Ā muri i te arotake

7.1 Completing the case summary, review tool and action template

Once the coordinator has finished completing the case summary, review tool and action template, the completed documents should be sent to all members of the review team for their confirmation and approval. This should be done within two weeks of the meeting. These then become the draft findings that are checked with the woman and the clinicians.

7.2 Communicating findings

Sharing the draft findings in an appropriate and sensitive manner is a critical step in the review process. It is important the woman and clinicians have an opportunity to provide feedback on the findings and recommendations, and that this is listened to and considered. The draft findings must be shared with the woman and the clinicians directly involved in her care before the final report is presented to the clinical governance committee.

Sharing the draft findings with the woman

Sharing the findings and recommendations with the woman and her family or whānau must be done in a respectful manner, at a time and place that works best for her and with support from whomever she chooses to be there. The key contact identified at the outset of the review process, and who has already engaged with the woman, should continue to be the key contact.

Be mindful of how the findings may impact the woman and her family and whānau. Communicate the findings and recommendations in a sensitive and culturally appropriate way that invites understanding and questions. The purpose is to provide an opportunity to discuss the findings and recommendations, and receive feedback for consideration in the final review document.

Explain what will happen next, and ask the woman how she would like to receive the final review findings and recommendations – for example, whether she would like to meet to discuss them or receive them via email.

Sharing the draft findings with the clinicians

Ideally, the draft findings and recommendations should be shared with the clinicians who were involved in the case, including appropriate support as desired, through a face-to-face meeting. This does not need to be with the key contact, but could be the chair of the review team, or a designated review team member. The purpose is to provide an opportunity to discuss the findings and recommendations, and receive feedback for consideration in the final review document.

Finalising the findings and recommendations

Once feedback has been received from both the woman and her family and whānau, and the clinicians, this should be sent through to the coordinator, who is responsible for circulating the feedback and discussing it with the review team members. Small changes can be resolved and amended via email and then signed off by the chair. If there are significant changes, we recommend the review team reconvenes to discuss the feedback and agree and make any necessary changes before finalising the findings and suggested recommendations.

Presenting findings to the clinical governance committee

The final review findings and suggested recommendations are presented to the clinical governance committee for them to endorse and delegate any actions, which they will record on the action template.

Once the women, clinicians and clinical governance committee have been informed, anonymised summaries of the cases and the findings and recommendations should be presented in a range of

settings, including educational forums. Presentations should include a summary of both positive and negative factors identified to highlight examples of exemplary care and areas for improvement.

Under the principle of shared learning, the findings should be shared with the Health Quality & Safety Commission by completing the shared learning tool, which is part of its adverse event reporting process.[35]

7.3 Implementing recommendations

There is always the risk that findings, recommendations and actions have a short-term and immediate impact on the service but no sustained long-term effect.[36] The clinical governance committee is responsible for making sure the lessons, recommendations and any subsequent changes to practice are embedded within the maternity service. They need to be aware of this risk and committed to promoting a culture of sustained learning and improvement.

The clinical governance committee must also evaluate the impact of the recommendations to determine whether they have successfully reduced episodes or severity of maternal morbidity, reduced health inequities for women, and improved outcomes.

A review process benefits when its recommendations and improvements are implemented in a timely manner. Each service must have a process to ensure recommendations and actions are completed and evaluated, or escalated as necessary.

35 Health Quality & Safety Commission. 2017. *Adverse events shared learning tool.* Wellington: Health Quality & Safety Commission. URL: www.hqsc.govt.nz/our-programmes/adverse-events/publications-and-resources/publication/2995 (accessed 15 October 2018).

36 Barnsley Safeguarding Children Board. 2013. *Learning and improvement framework: incorporating a toolkit for conducting serious case reviews with guidance and templates and alternative methods for learning events.* URL: www.proceduresonline.com/barnsley/scb/files/toolkit_srs_case_review.pdf (accessed 29 October 2018).

8 Summary and conclusion | Whakarāpopotanga me te kupu whakatepe

This document provides a toolkit to guide maternity services in reviewing cases of severe maternal morbidity or 'near misses' so we all can learn from these events and help to improve outcomes.

The toolkit encourages review teams to identify where high-quality care has been given because it provides opportunities for learning, creativity, innovation and improved resilience.

Reviews facilitate maternity teams to learn, share and thereby minimise the future impact on women, on their families and whānau, and on maternity care providers.

Supporting clinicians throughout the aftermath of a severe maternal morbidity event is recognised as an important component in establishing a culture that is fair and safe.

The MMWG trusts that this toolkit will be active within the maternity services, and that together we share the vision of improved outcomes for mothers and babies in Aotearoa New Zealand.

Appendix 1: Glossary | Āpitihanga 1: Te kuputaka

Adverse event (also known as an 'incident' or 'reportable event'): An event with negative or unfavourable reactions or results that are unintended, unexpected or unplanned.[37] In practice, this is most often understood as an event that results in harm or has the potential to result in harm to a consumer.

Always report and review list: A subset of adverse events that should be reported and managed in the same way as SAC 1 and 2 rated events, irrespective of whether or not there was harm to the consumer. Always report and review events are events that can result in serious harm or death but are preventable with strong clinical and organisational systems.[38]

Clinical governance: 'Provides a means for clinicians, managers and other staff to work together to improve and be held accountable for the quality and safety of the health and disability services they provide.'[39]

Human factors: 'Human factors refer to environmental, organisational and job factors, as well as human and individual characteristics that influence behaviour at work and may affect health and safety. A simple way to view human factors is to think about three aspects – the job, the individual and the organisation – and how they impact people's health and safety-related behaviour.'[40]

Just culture: A culture in which frontline personnel are comfortable with disclosing errors, including their own, while maintaining professional accountability. It recognises that individual practitioners should not be held accountable for system failings over which they have no control, but it does not tolerate conscious disregard of clear risks to patients or gross misconduct.[41]

Mātauranga: Te reo Māori word meaning 'knowledge, wisdom, understanding, skill'.[42]

Māreikura: Te reo Māori word meaning 'an order of female supernatural beings', which could be explained as the spiritual elements of what it means to be a woman; or 'womanhood'.[43]

Near miss: An event that under different circumstances could have caused harm to a consumer but did not, and that is indistinguishable from an adverse event in all but outcome.

Pēpi: Te reo Māori word for baby.

Second-victim phenomenon: Clinicians involved in an incident may experience victim phenomena (termed 'second-victim'). The symptoms may be identified as detachments, depression, anxiety, impaired clinical performance and confidence.

Severe acute maternal morbidity (also known as maternal 'near miss'): A very ill pregnant or recently delivered woman who would have died if luck or good care had not been on her side.[44]

37 Health and Disability Services Standards NZS8134:2008. URL: www.health.govt.nz/our-work/regulation-health-and-disability-system/certification-health-care-services/services-standards (accessed 15 October 2018).

38 Always report and review list (www.hqsc.govt.nz/our-programmes/adverse-events/publications-and-resources/publication/2936) and the Severity Assessment Code (SAC) rating and triage tool for adverse event reporting (www.hqsc.govt.nz/our-programmes/adverse-events/publications-and-resources/publication/2937).

39 Health Quality & Safety Commission. 2017. *Clinical governance: Guidance for health and disability providers.* Wellington: Health Quality & Safety Commission. p 3. URL: www.hqsc.govt.nz/publications-and-resources/publication/2851 (accessed 15 October 2018).

40 Health and Safety Executive. 1999. *Reducing error and influencing behaviour.* p 5. URL: http://www.hse.gov.uk/pUbns/priced/hsg48.pdf (accessed 15 October 2018).

41 Centre for Patient Safety. 2018. *Patient Safety Glossary.* Jefferson City, MO: Centre for Patient Safety. URL: www.centerforpatientsafety.org/patient-safety-glossary (accessed 15 October 2018).

42 Te Aka Maori-English, English-Maori Dictionary and Index. URL: http://maoridictionary.co.nz/search?idiom=&phrase=&proverb=&loan=&histLoanWords=&keywords=M%C4%81tauranga (accessed 15 October 2018)

43 Te Aka Maori-English, English-Maori Dictionary and Index. URL: http://maoridictionary.co.nz/search?idiom=&phrase=&proverb=&loan=&histLoanWords=&keywords=M%C4%81reikura (accessed 15 October 2018).

44 Mantel GD, Buchmann E, Rees H, et al. 1998. Severe acute maternal morbidity: a pilot study of a definition for a near-miss. *BJOG: An International Journal of Obstetrics & Gynaecology* 105(9): 985–90. DOI: 10.1111/j.1471-0528.1998.tb10262.x

Severity Assessment Code (SAC): The SAC is a numerical rating which defines the severity of an adverse event and as a consequence the required level of reporting and review to be undertaken for the event.[45] The SAC rating tool is attached as 'Appendix 5: Severity Assessment Code (SAC) rating tool'.

Social determinants of health: The following factors are known as social determinants – employment and associated working conditions; income and its equitable distribution; early childhood development and education; food and housing security; age; race; and gender.[46]

Tikanga: Te reo Māori word meaning 'correct procedure, custom, habit, lore, method, manner, rule, way, code, meaning, plan, practice, convention, protocol – the customary system of values and practices that have developed over time and are deeply embedded in the social context.'[47]

45 Health Quality & Safety Commission. 2017. *Severity Assessment Code (SAC) rating and triage tool for adverse event reporting.* URL: www.hqsc.govt.nz/our-programmes/adverseevents/publications-and-resources/publication/2937 (accessed 15 October 2018).

46 McPherson C, McGibbon E. 2014. Intersecting contexts of oppression within complex public systems. In A Pycroft, C Bartollas (eds), *Applying Complexity Theory.* Bristol: Policy Press.

47 Te Aka Maori-English, English-Maori Dictionary and Index. URL: http://maoridictionary.co.nz/search?idiom=&phrase=&proverb=&loan=&histLoanWords=&keywords=tikanga (accessed 15 October 2018).

Appendix 2: Toolkit resources – explanations and links | Āpitihanga 2: Rauemi kete – he whakamārama, he hononga

Terms of reference template

The draft terms of reference for maternal morbidity case review include meeting protocol, confidentiality responsibilities, and roles and responsibilities of the chair and members.

The terms of reference template is available at www.hqsc.govt.nz/our-programmes/mrc/pmmrc/publications-and-resources/publication/3499.

Example of a trigger list

A trigger list demonstrates what would commonly be found on a maternity list for monitoring conditions and initiating review. Trigger lists are developed locally in response to maternity service trends or clinical indicators. These are reviewed annually, and are receptive to national priorities.

An example trigger list is available at www.hqsc.govt.nz/our-programmes/mrc/pmmrc/publications-and-resources/publication/3497.

Maternal morbidity review template

This template has three parts:

- case summary template
- maternal morbidity review tool
- action template.

The case summary template can be used to summarise the timeline of events surrounding a case of maternal morbidity. It is completed before the review and provided to review team members in preparation for the meeting.

The maternal morbidity review tool is a template that the review team completes at the review meeting. It helps review teams to identify factors that may have affected care, or contributed to the event/severity of the morbidity. The template also leaves room for teams to identify what went well, and where things could be improved.

The action template is for review teams to use at the review meeting, to record the outcomes of the review and any recommendations that are developed, and to assign and track actions. It helps to ensure that recommendations are sustainable and evaluated.

The review template is available online in MS Word format at www.hqsc.govt.nz/our-programmes/mrc/pmmrc/publications-and-resources/publication/3496.

The action template is also available in MS Excel format: www.hqsc.govt.nz/our-programmes/mrc/pmmrc/publications-and-resources/publication/3510.

Maternal morbidity review checklist

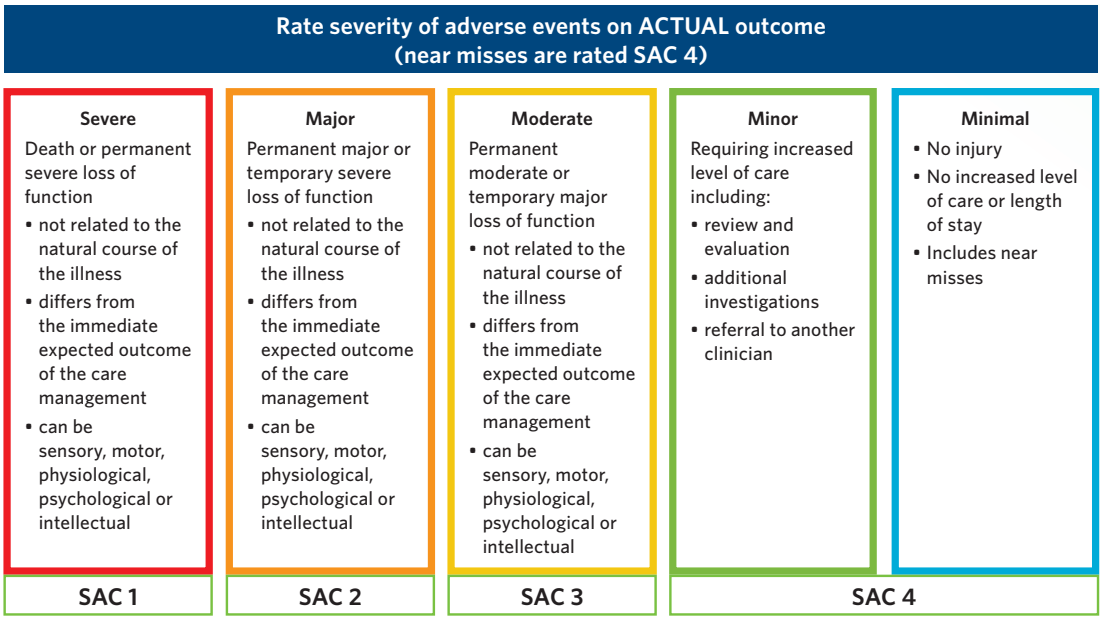
This checklist enables the review team to plan and complete all components of the review process.

The checklist is available online in:

- MS Word format at www.hqsc.govt.nz/our-programmes/mrc/pmmrc/publications-and-resources/publication/3498
- MS Excel format at www.hqsc.govt.nz/our-programmes/mrc/pmmrc/publications-and-resources/publication/3511.

Health Equity Assessment Tool (HEAT) is available at www.health.govt.nz/system/files/documents/publications/health-equity-assessment-tool-guide.pdf.

Appendix 3: Severity Assessment Code (SAC) rating tool[48] | Āpitihanga 3: Taputapu whakatau Severity Assessment Code (SAC)



See also the SAC rating and triage tool for adverse event reporting.[49]

48 Health Quality & Safety Commission. 2017. *National Adverse Events Reporting Policy 2017.* Wellington: Health Quality & Safety Commission. URL: www.hqsc.govt.nz/our-programmes/adverse-events/national-adverse-events-policy (accessed 15 October 2018).

49 Health Quality & Safety Commission. 2017. *Severity Assessment Code (SAC) rating and triage tool for adverse event reporting.* URL: www.hqsc.govt.nz/our-programmes/adverseevents/publications-and-resources/publication/2937 (accessed 15 October 2018).

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