Learning from adverse events

Adverse events reported to the Health Quality & Safety Commission

1 July 2016 to 30 June 2017
Acknowledgments

This report was prepared by the Health Quality & Safety Commission based on information and data provided by district health boards and other health and disability service providers.

We must acknowledge the experiences of the consumers and whānau affected by the events discussed in this report and we honour this with a commitment to learn and improve.

We are grateful to everyone who has collectively contributed to this report. In particular, we would like to acknowledge those who have provided expert commentary and shared their experiences and learning stories relating to adverse events reporting, review and learning.

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The role of an adverse events reporting, review and learning system is to enhance consumer safety by learning from adverse events and near misses that occur in health and disability services. The Health Quality & Safety Commission (the Commission) published its first report in 2010. Since reporting began, the number of events reported by district health boards and other providers has increased over time. As we have noted in previous years, this increase probably reflects a change in culture towards increased transparency and learning from system failings, rather than an increase in adverse events themselves.

Each of the adverse events reported here involves a person and their whānau, family and friends. I would like to acknowledge the people affected by the tragic events outlined in this report. These reviews help us achieve safer health care and reduce the risk of future events of the same kind. The process of improvement is gradual, but gains are being made, year on year, and every small step matters in the pursuit of patient safety.

This year’s report reflects a stronger focus on consumers as partners in learning from adverse events – both the people affected by the event, and the independent consumers involved in the review process. Partnering with consumers and whānau in the review and learning process is pivotal to improving safety and quality. Done well, this can be beneficial to consumers as it provides an understanding of contributing factors and of what should be done to improve safety of care. Improving consumer experience and reducing harm are strategic priorities for the Commission. Thus, consumer engagement is a key expectation of the updated National Adverse Events Reporting Policy 2017, released 30 June 2017.

Another key theme in the new Policy is the accountability of governance boards for the reporting of and response to adverse events. The governance boards of national organisations are responsible for national reporting and information-sharing activities happening in a timely way and for ensuring that recommendations from reviews of the events are properly and formally considered for action.

This year the Commission hosted Professor Erik Hollnagel, an internationally recognised specialist, to facilitate a masterclass on ‘Safety II’ and on building resilience in health care. In addition to learning from things that go wrong, Prof Hollnagel (and others) advocate also learning from the much more frequent things that ‘go right’. In this report Dr Carl Horsley provides us with his reflections on Safety II from his view on the front line.

This report has a wealth of information within it. I hope it will assist and inform the ongoing efforts of all of us who grapple with the challenges of providing safe health care to patients in New Zealand.

I would like to thank the health providers that contribute to reports. We are clearly seeing continuing commitment to transparency, active engagement in learning opportunities and sharing of lessons learnt. I believe we are continuing to improve the way we work and the way we design the already very good system within which we work. Nevertheless, these ongoing efforts are essential for reducing the avoidable patient harm that, sadly, still exists in New Zealand.

Professor Alan Merry ONZM FRNSNZ
Chair, Health Quality & Safety Commission
The purpose of adverse events reporting is to respect and understand the experience of the affected consumers and whānau to improve consumer safety. Each number discussed in this report reflects an individual and their whānau harmed in the process of engaging with health care services. The information reported reflects more than numbers. An adverse event review and report, done well, draws out rich contextual information about the person’s journey through the health care system, making sense of the situation by identifying and addressing the underlying contributing systems and human factors. The process of national reporting on adverse events openly demonstrates to the public a provider culture of open communication and learning from these events.

At the national level, the Health Quality & Safety Commission (the Commission) can shine light on key, and sometimes frequently occurring, areas of harm, which allows a national focus and informs the development of national improvement programmes. Examples of this are our reducing harm from falls and recognition and response to patient deterioration programmes. The rich information that can be taken from adverse events reviews is used by the Commission to contribute to thinking and knowledge in other improvement programmes, such as infection prevention and control. The reporting process challenges traditional paradigms that some harm is a normal and accepted consequence of health care treatment.

The adverse events learning programme focuses on the insights and subsequent improvements from review of adverse events. Through Open Book publications, this report and sector engagement, we share information with providers across New Zealand so potential for similar harm can be reduced in the future. Analysis and comparison of numbers of events reported is of limited value due to variations in reporting practice across the health care sector. High numbers may indicate a district health board (DHB) has a good reporting culture, or provides larger and more complex regional services. It may also be an indicator of emerging issues of concern, such as delays in ophthalmology reported last year. All reporting is based on local processes, and the interpretation and implementation of the National Reportable Events Policy (the Policy).

The reporting of adverse events is one part of a broader safety framework within New Zealand to make health care as safe as possible. Other measures and methods are required to demonstrate changes over time. These include reports and recommendations developed by the Commission’s mortality review committees, the Health and Disability Commissioner’s reports, Accident Compensation Corporation’s treatment injury reports, coronial findings and reports, and direct reporting to the Ministry of Health (the Ministry). These reports are based on very different data sets, collected for different purposes. All contribute to the overall picture of harm in New Zealand.

When the Commission took on responsibility for reporting on adverse events, the initial focus was on building the reporting culture within DHBs. The subsequent focus has been on improving the quality of reviews, with a greater focus on identifying and addressing underlying contributing human factors and systems issues. The next and most important focus of work is on engaging consumers and whānau in the process of adverse events review.

On 30 June 2017 the updated Policy 2017 was released following wide sector engagement and feedback. Key features of the updated Policy are: an enhanced focus on consumer involvement in adverse events reporting, review and learning, and wider health and disability sector engagement with the Policy and associated reporting processes.

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1 www.hqsc.govt.nz/our-programmes/mrc/publications-and-resources
2 www.hdc.org.nz/decisions--case-notes
3 www.acc.co.nz/for-providers/treatment-safety
4 https://coronialservices.justice.govt.nz/findings-and-recommendations
5 www.health.govt.nz/publications
The updated Policy requires a number of changes to systems and practices. The changes will contribute to improved consumer engagement in the review process, consistency of adverse events classification and reporting, quality of review and accountability for action. These changes are described in more detail in this report.

The Commission recognises that some of the Policy changes may take time to embed. Therefore, the 2017–18 year will represent a transitional year with regard to reporting, review and learning practice. This may also be reflected in the numbers reported in future years.

A key focus of the updated Policy is on consumer participation in adverse events review and learning processes. Research shows that consumers who have been affected by an adverse event offer a unique perspective on that event, including an integrated view of the system that spans their entire care or support journey. Involvement in the review of an adverse event can also be healing and restorative for the affected consumer. This report provides a stepped guide to engaging with consumers following an adverse event.

The consumer engagement process involves consumer input to the review process and ongoing, open communication between health and disability service providers and affected consumers and their whānau.

The national mental health and addictions quality improvement programme recently launched by the Commission has a workstream focused on adverse events and consumer experience. This work will further inform approaches to mental health adverse events reporting, review and learning.

**Executive summary of adverse events reporting 2016–17**

The adverse events presented in this 2016–17 *Learning from adverse events* report are based on requirements set out in the previous National Reportable Events Policy 2012. The updated Policy came into effect 1 July 2017.

In 2016–17, 542 adverse events were reported to the Commission by district health boards (DHBs) and 86 by other health and disability service providers.

- Clinical management events, a grouped category, were the events most frequently reported by DHBs, with 282 cases. The clinical management category is further broken down in this report to provide basic clinical context and themes for further analysis. This brief analysis indicates that a number of clinical management events related to: delayed diagnosis or treatment; and pressure injuries.
- Serious harm from falls was the second most frequently reported event by DHBs, with 210 cases. Of these, 77 resulted in the patient suffering a fractured neck of femur (broken hip). There has been an overall reduction in the reported incidence of falls resulting in serious harm.
- There were 19 medication-related, 16 healthcare associated infection and 15 other events reported by DHBs.
- The Commission works with the Director of Mental Health to publish adverse events affecting users of DHB mental health and addictions services. In the 2016 calendar year, DHBs reported 210 such events. These are included in the Office of the Director of Mental Health’s annual report, which is planned for publication later this year.
- Eighty-six adverse events were reported to the Commission by other providers: 28 from ambulance services, 52 from the New Zealand Private Surgical Hospitals Association and 6 from other providers.
- Last year ambulance services started directly reporting adverse events to the Commission, including review findings. There were 28 adverse events reported by ambulance services this year, a decrease

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8 An adverse event is an event with negative or unfavourable reactions or results that are unintended, unexpected or unplanned. 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. Under the Policy, DHBs are required to report adverse events classified as Severity Assessment Code (SAC) rating 1 or 2 to the Commission.

9 Mental health events are reported using the calendar year in line with the Office of the Director of Mental Health reporting structure.
from 101 events last year. This year, the Commission has continued to work with ambulance services, and the National Ambulance Sector Office, to standardise application and consistency of adverse events classification and reporting practices between service providers. These process improvements have resulted in fewer adverse events being reported to the Commission, providing a more accurate reflection of serious harm in this sector.

It should be noted that work undertaken by the Commission and other agencies on focused programmes, training and current issues can drive reporting practice. Examples of this include:

- increased reporting of pressure injuries (see Chapter 4)
- the Commission’s improvement programme activities focused on surgical site infection, which may have contributed to the increased reporting of cases of healthcare associated infection, leading to this being a stand-alone category for the first time (see Appendix A).

While there has been steady improvement in adverse events review and reporting over time, there is still work to be done as preventable harm continues to occur. This will be aided by implementation of the updated Policy, which is key to improving the safety of health and disability services.

**Recommendations**

To continue the improvement of the safety and experience of care in health and disability services, the Commission recommends the following for 2017–18:

**Providers:**

- work to implement the Policy changes into existing policies, processes and systems
  - a priority focus should be given to action in partnering with consumers and their whānau in adverse events review and learning processes
- build capability to support good quality adverse events review and consider taking up the opportunity to receive feedback from the Commission on reviews
- consider sharing full, non-identifiable review reports with the Commission to enhance the potential for national learning and improved analysis of adverse events
- work to improve the timeliness of reporting and review of adverse events to meet Policy expectations
- work to ensure governance oversight of serious adverse events review, including recommendations and actions to be completed.

**The Commission:**

- supports providers to implement the updated Policy, particularly in moving to a more consumer-centred approach, improving systems for reviewing, reporting and learning
- continues to develop resources, guidance and tools to support Policy implementation
- develops and improves capability in adverse events review. This includes continuation of existing adverse events review training, development of a masterclass and consideration of emerging ideas in future programme development, for example, from feedback generated at the Safety II workshop (see pp33–35)
- continues to support the health and disability sector in reporting and learning from adverse events.
The role of an adverse events reporting system is to improve safety and experience for consumers and their whānau by learning from adverse events and near misses\textsuperscript{10} that occur in health and disability services.

In New Zealand, reporting of adverse events and near misses is guided by the National Adverse Events Reporting Policy (the Policy) that was first released in 2012 and updated this year. Under the Policy, health and disability service providers with obligations under the Health and Disability Services (Safety) Act 2001\textsuperscript{11} and those who voluntarily comply, are expected to notify the Commission of adverse events rated Severity Assessment Code (SAC) 1 or 2, and provide the Commission with findings and recommendations from review of these events to enable national learning.

The purpose of this report is to provide focused commentary, to continue to develop and inform consumer safety thinking, to raise themes emerging from adverse events reporting for the Commission and the sector to consider in the coming year and to update on adverse events learning programme activities in 2016–17. There are six key themes to report on.

1. The updated Policy, which came into effect 1 July 2017, and implications of Policy changes. This section will also provide information on the Commission’s mental health and addictions quality improvement programme and the Suicide Mortality Review Committee, which has received funding for ongoing work.

2. ‘Consumers as partners in learning from adverse events’ is the speciality focus for the Commission for 2017. This section pulls together literature relating to consumer engagement in adverse events review and recommendations developed from the Policy update consultation. It also provides an expert viewpoint on the process for rebuilding trust for Māori whānau following an adverse event, and DHB and consumer viewpoints on involving consumers in adverse events reviews.

3. Reflections on the adverse events learning programme and sector activities in 2016–17, including engagement with the wider health and disability sector. This section includes information relating to adverse events review training workshops, Open Book publications and the trigger tool programme. There is also commentary relating to an emerging model of thinking termed ‘Safety II’ and opportunities to include this in safety thinking and practice.

4. Learning from adverse events reported by DHBs. This section provides data and information on the adverse events as reported by DHBs. It focuses on insights, lessons learned and themes emerging from 2016–17 reporting.

5. Learning from adverse events reported by non-DHB providers. This includes examples of learning and changes developed by a private hospital and an ambulance service following adverse events reviews.

6. Conclusion and next steps.

\textsuperscript{10} A near miss is an event which, under different circumstances, could have caused harm to a consumer but did not, and which is indistinguishable from an adverse event in all but outcome.

Chapter 1: National Adverse Events Reporting Policy 2017

At the centre of every adverse event review undertaken, there is an affected consumer and their whānau. We have a responsibility to these people to review, learn, implement effective changes to the system and share learnings across health and disability services. The updated Policy aims to reflect this focus.

The Policy was first released in 2012 as the National Reportable Events Policy. It has recently been updated with the new Policy coming into effect on 1 July 2017. The Policy update was informed by extensive consultation with stakeholders from across the health and disability system and a review of international literature on patient safety reporting systems.

Five overarching themes for change were developed from the Policy consultation process:

1. Increase the focus on the people who use health and disability services.
2. Expand the Policy purpose statement to clarify roles and expectations.
3. Increase the focus on learning, action and follow-up after event reviews.
4. Make it easier for organisations to report.
5. Make the Policy relevant to the whole health and disability sector.

These themes are reflected in a number of changes to the Policy, as described in Table 1.

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**Table 1: Key Policy changes by theme**

<table>
<thead>
<tr>
<th>Increase the focus on people who use health and disability services</th>
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<tbody>
<tr>
<td>A more consumer-centred approach to adverse events reporting, review and learning, including an expectation of culturally appropriate review practice and consumer involvement in the review process.</td>
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<tr>
<td>The principle of open communication has been strengthened to make it explicit that consumers and their whānau are ethically and legally entitled to truthful and open communication following an adverse event.</td>
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<td>The Commission will be focusing on collecting ethnicity data in adverse events reports, in accordance with the <em>Ethnicity Data Protocols for the Health and Disability Sector</em>, so we can apply an equity lens to future reporting on adverse events.</td>
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<tr>
<th>Expand the Policy purpose statement to clarify roles and expectations</th>
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<tr>
<td>Improved clarity regarding national and local roles in reporting, review and learning systems, and an increased emphasis on the roles and responsibilities of organisational governance.</td>
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<tr>
<td>An explicit expectation that accountability at the local level includes a role for governors of health and disability service providers in implementing and following up review recommendations, and a role for governors of national organisations in ensuring analysis, national reporting and information sharing takes place in a timely way.</td>
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<tr>
<th>Increase the focus on learning, action and follow up after adverse events reviews</th>
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<tr>
<td>A strong focus on enhanced learning and action from adverse events, particularly through improved quality of reviews, increased action following reporting and encouragement to report SAC 3 and 4 rated and near-miss events where there is value for national learning.</td>
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<tr>
<td>Flexibility to use a wide range of review methodologies, and opportunity to receive feedback from the Commission on reviews.</td>
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<td>Explicit expectation that health and disability service providers will have processes to support staff involved in adverse events.</td>
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<th>Make it easier for organisations to report</th>
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<tr>
<td>Introduction of an Always Report and Review list, a subset of events that should be reported and reviewed irrespective of whether there was harm to the consumer; this list will be regularly updated and additional organisation-specific events of importance can be added.</td>
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<tr>
<td>Classification of event severity based solely on outcome for the affected consumer; the likelihood table has been removed, however, the table can still be used for organisational risk management purposes.</td>
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<tr>
<td>Development of an SAC rating and triage tool for adverse events reporting, to clearly show pathways for classifying, reporting and reviewing adverse events, near misses and Always Report and Review events.</td>
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<tr>
<th>Make the Policy relevant to the whole health and disability sector</th>
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<tr>
<td>Clear intention to extend coverage of the national reporting, review and learning system across the whole health and disability sector, including a single policy and reporting process for events that occur in different parts of the sector.</td>
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<tr>
<td>Removal of separate processes for reporting and review of mental health and addiction adverse events.</td>
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Changes to mental health and addiction service reporting processes

The 2017 Policy supports a shift towards mental health and addiction adverse events following the same reporting and review processes as non-mental health and addiction events. Currently, adverse events relating to users of DHB-funded mental health and addiction services are reported to the Commission, in line with the Policy, but publicly reported by the Office of the Director of Mental Health. Historically, the majority of adverse events occurring in mental health and addiction services were reviewed using the London Protocol, as this methodology was deemed by the sector to be more suitable than the root cause analysis approach more commonly used in the wider health and disability sector.

In the updated Policy, separate reporting and review processes specific to the mental health and addiction context have been removed. The 2017 Policy allows for use of a broader range of review methodologies, including those more suited to the mental health and addiction context. There is also clearer guidance, provided in the SAC examples table, to improve consistency of reporting across the sector. The Commission is working with the Office of the Director of Mental Health to determine how learnings from events that occur in mental health and addiction services will be reported and shared in the future. In the meantime, numbers of events will continue to be shared through the Office of the Director of Mental Health’s annual report and learnings from reviews will be shared through the Commission’s Open Book reports and other learning forums.

Mental health and addiction quality improvement programme: Learning from adverse events and consumer experience in mental health

The Commission is leading a new, five-year national mental health and addiction quality improvement programme, which began on 1 July 2017. The programme will see the Commission partner with consumers, their families and whānau, and service providers to continue to improve the quality of mental health services. The goals are better consumer experience, better and safer services, and more effective use of health care funding.

The programme will use improvement science\(^\text{17}\) to test evidence-based changes and interventions locally, measure the impact of these changes, and if the changes are successful, work with other services to implement the changes more widely. It will focus on five priority areas:\(^\text{18}\)

- minimising restrictive care
- improving medication management and prescribing
- improving service transitions
- maximising the physical health of people with mental health and addiction problems
- learning from serious adverse events and consumer experience.

Four regional workshops have been held by the programme team to help inform the development of each workstream. These were well attended by consumers and providers.

Key themes raised for the learning from serious adverse events and consumer experience workstream included: increasing consumer and whānau engagement; improving communication and the importance of listening; open communication following an adverse event; and sharing lessons learned. The themes align strongly with the direction of the updated Policy. This workstream will inform approaches to mental health adverse events reporting, review and learning.

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18 The wording of these five priority areas may change slightly when the mental health and addiction quality improvement programme is finalised, but the topic themes will remain the same.
**Suicide Mortality Review Committee**

Suicide is a major cause of death in New Zealand and the most common cause of death for young people. In September 2013, the Ministry of Health contracted the Commission to trial suicide mortality review, an action set out in the *New Zealand Suicide Prevention Action Plan 2013–2016*.\(^{19}\) This resulted in the establishment of the Suicide Mortality Review Committee (SuMRC) within the Commission, and the suicide mortality review feasibility study.

The Commission published the resulting reports, including recommendations, in May 2016.\(^{20}\)

Following the successful SuMRC trial, the Minister of Health announced in July 2017 that the SuMRC would receive funding for ongoing work. The SuMRC will provide vital knowledge about factors and patterns of suicide, to guide new suicide prevention activities and reinforce and strengthen existing activities. The first meeting of the SuMRC took place in September 2017.

**Transitioning to the new Policy**

It is important to note that adverse events information presented in Chapters 4 and 5 relates to the 2016–17 year, prior to the new 2017 Policy coming into effect. All adverse events occurring on or after 1 July 2017 are covered by the new Policy.

It is expected that health and disability service providers will modify their practice as soon as possible to accommodate changes associated with the Policy. However, the Commission recognises that some of the changes may take time to embed into systems and practice. As such, the 2017–18 year will represent a transitional year with regard to reporting, review and learning practice.

Policy changes may impact on the number and types of adverse events reported to the Commission in future years. Careful consideration will need to be applied when analysing and comparing annual figures. Key changes likely to impact on reported adverse events include: the introduction of Always Report and Review events; changes to the SAC classification approach; and encouragement to report to the Commission near miss and SAC 3 and 4 rated events with value for national learning.

The Commission will continue to develop and provide guidance, resources and educational material to support implementation of the Policy over time. The team welcomes enquiries and feedback relating to the Policy and associated documents.

Contact us at adverse.events@hqsc.govt.nz.

**Introduction of Always Report and Review list**

The updated Policy now includes an Always Report and Review list, as shown in Table 2. The events included in the list have been reported in the past, however, previously only those rated SAC 1 or 2 were reported to the Commission. The change in the development and addition of this list is that there is a subset of adverse events that should be reported and reviewed, *irrespective of whether or not there was harm to the consumer*. Always Report and Review events can result in serious harm or death but are preventable with strong clinical and organisational systems.

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Wrong blood component

Actual or near-miss administration of incorrect, incompatible or contaminated blood product.

Wrong site

A procedure/intervention performed on the wrong site (e.g., wrong knee, wrong eye, wrong level spinal surgery, wrong limb, wrong tooth or wrong organ); the event is detected at any time after the start of the procedure/intervention.

- Includes interventions that are considered surgical but may be done outside of a surgical environment. For example, wrong site block (unless being undertaken as a pain control procedure), biopsy, interventional radiology procedures, cardiology procedures, drain insertion and line insertion (e.g., peripherally inserted central catheter (PICC)/Hickman lines).
- Includes events where the wrong site surgery is due to incorrect laboratory reports/results or incorrect referral letters.
- Excludes interventions where the wrong site is selected because of unknown/unexpected abnormalities in the patient’s anatomy. This should be documented in clinical notes.

Wrong implant/prosthesis

Surgical placement of the wrong implant or prosthesis where the implant/prosthesis placed in the consumer/patient is other than that specified in the surgical plan; the event is detected at any time after the implant/prosthesis is placed in the consumer/patient.

- Excludes where the implant/prosthesis placed in the consumer/patient is intentionally different from the surgical plan, where this is based on clinical judgement at the time of the procedure. This should be documented in clinical notes.
- Excludes where the implant/prosthesis placed in the consumer/patient is intentionally planned and placed but later found to be suboptimal.

Retained foreign object post-procedure

Retention of a foreign object in a consumer/patient after a surgical/invasive procedure.

- Includes interventional radiology, cardiology, interventions related to vaginal birth and interventions performed outside of the surgical environment (e.g., central line placement in ward areas, procedures performed in ‘rooms-based’ and outpatient settings).
- Excludes items inserted during a procedure that are subject to the counting/checking process, but are intentionally retained after completion of the procedure, with removal planned for a later time or date. This should be documented in clinical notes. If these items are not subsequently removed at the planned date, this would become an Always Report and Review event.
- Excludes items that are known to be missing prior to the completion of the procedure and may be within the consumer/patient (e.g., screw fragments, drill bits) but where further action to locate and/or retrieve would be impossible or be more damaging than retention. This should be documented in clinical notes.

Wrong consumer/patient

Any invasive procedure/investigation performed on the wrong consumer/patient; the event is detected at any time after the start of the procedure/investigation.

- Includes radiology and invasive procedures (such as biopsy, endoscopic procedures, cardiology procedures).

Child/infant abduction or discharge to wrong family/whānau

Includes all events regardless of time absent from area or successful return.
Chapter 2: Consumers as partners in learning from adverse events

‘Consumer safety requires that consumers and families partner with providers to prevent consumer safety incidents. When these incidents do happen, consumers, families and providers can take actions to protect those involved from further harm, allow them to heal and understand what happened, and to make improvements to the process or system. Rather than blaming or punishing, the goal is to balance and understand care processes and systems that may cause consumer safety incidents.’

The role of an adverse events reporting, review and learning system is to enhance consumer safety by learning from adverse events and near misses that occur in health care and disability support services. Partnering with consumers, their families and whānau in the review and learning process is pivotal to improving safety and quality. As such, consumer engagement is a key expectation of the Policy.

Consumer engagement in health care and disability support

Improving consumer engagement in health care and disability support is a global movement. In its 2013 report, Patient and family engagement, the World Innovation Summit for Health (WISH) focuses on the critical role consumer engagement plays in shaping future health and disability services.

Box 1: Key terms

- Consumer: Individuals, families and whānau who have had personal experiences in the health and disability system, or who might use health and disability services in the future.
- Affected consumer: Individuals, families and whānau who have experienced an adverse event or a near miss in the health and disability system.
- Independent consumer: A member of an adverse events review team who is there to provide a consumer perspective on the event; this person has not been affected by the adverse event under review.
- Consumer engagement: A process where consumers of health and disability services are encouraged and empowered to actively participate in decisions about the treatment, services and care they need and receive.

21 For consistency with terminology used throughout the chapter, ‘patient’ has been changed to ‘consumer’ in this quote. See Box 1 for definitions of terms used in this chapter.
The WISH report positions consumer engagement as ‘a powerful tool’ for improving global health. It describes the large and growing body of international evidence to support the benefits of engaging with consumers in health care and disability support. Benefits include better health outcomes, safer care, better quality of care, reduced health care utilisation, lower costs, improved consumer knowledge and experience, and increased health worker satisfaction.

In New Zealand, consumer engagement is underpinned by the Code of Health and Disability Services Consumers’ Rights25 and the Treaty of Waitangi. The Treaty of Waitangi between the Crown and tangata whenua (Māori) describes the principles of mana whenua, kaitiakitangi and manaakitanga: participation, partnership and nurturing relationships. These principles form the basis of interactions between Crown agencies and Māori, including health and disability services. The Code of Health and Disability Services Consumers’ Rights sets out consumers’ rights in relation to health and disability services, including the right to respect, information, choice, equity, dignity, effective communication, support and full involvement.

Improving consumer experience is a strategic priority for the Commission.26 We recognise that consumer engagement is pivotal to improving safety and quality across the health and disability system. Our programmes aim to help health and disability service providers build strong relationships with consumers – not just as consumers of services but as active partners in their own care. A key focus for our adverse events learning programme is to improve responsiveness to consumers affected by an adverse events and to involve consumers nationally and locally in adverse events reporting, review and learning.

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**Box 2: Consumers and the National Adverse Events Reporting Policy 2017**

Consumer participation is one of six core Policy principles. This principle recognises that including the affected consumer’s perspective in the review of an adverse event enables a broader understanding of the circumstances surrounding that event. When reviewing an adverse event, the Policy requires that providers:

1. consider the event within the context of the whole consumer experience of care or support
2. offer consumers who have been involved in an adverse event the opportunity to share their story as part of the review process
3. share review findings and recommendations with affected consumers
4. consider involving independent consumers in the review process.

The principle of consumer participation is supported in the Policy by the principles of open communication and culturally appropriate review practice. These two principles guide providers to communicate with the affected consumer in a timely, truthful and open way following an adverse event, and consider the cultural viewpoints and practices of the consumer in every stage of the adverse event review and learning process.

Source: Health Quality & Safety Commission 2017a, op. cit.

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Consumer engagement in learning from adverse events

Consumers are engaged in safety and quality in two key ways:27

1. Safety management: These are the actions that help to proactively anticipate safety incidents and prevent them from occurring. They include managing safety risks, co-designing and testing safety solutions, and quality improvement processes

2. Adverse event management: These are the actions that follow adverse events, including event reporting, immediate response, event review, actions to reduce risk of recurrence and sharing learning.

The focus of this chapter is on the latter, specifically, the benefits, challenges and key approaches to partnering with consumers affected by adverse events in the review and learning processes that follow an adverse event.

Benefits

Because consumer engagement in adverse event management is still relatively new, there are few rigorous empirical studies demonstrating the effectiveness or impact of this approach.28 However, there is emerging evidence of benefit, as discussed below.

Consumers can recognise and report adverse events

There is evidence that consumers who have been involved in an adverse event are able to successfully identify and report adverse events,29 including those events not captured in clinical reporting systems or medical records.30 There is also evidence that some affected consumers are more comfortable reporting adverse events to a reporting system than directly addressing them with a provider.31 For these reasons, some jurisdictions are exploring new technologies and developing reporting systems specifically for consumers to report adverse events (separate from consumer complaints systems or provider reporting systems).32 There is a view that consumer reporting of adverse events may be beneficial because it minimises the time between the event occurring and reporting (ie, it allows for real-time reporting of events), thereby reducing recall bias. However, this is still an emerging area of research and evaluation of the value of consumer reporting is still in its infancy.33 In New Zealand, consumers can make a formal complaint to the Health and Disability Commissioner about the quality of health or disability services they have received, and sometimes these complaints will relate to an adverse event. However, there is currently no formal mechanism by which consumers can report an adverse event. The Commission intends to explore options for consumer reporting of adverse events over the next three to five years, including how any system would interface with provider reporting systems and the existing consumer complaints process.

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27 Canadian Patient Safety Institute, Patient Engagement Action Team 2017, op. cit.
33 Canadian Patient Safety Institute, Patient Engagement Action Team 2017, op. cit.
Box 3: Stakeholder views on consumer reporting of adverse events

Stakeholders consulted in the policy review had mixed views on consumer reporting of adverse events. Some stakeholders supported it because they see consumers as having different perspectives from providers on what constitutes an adverse event and its contributing factors. Reservations about consumer reporting related to the risk of confusion with, and duplication of, the existing consumer complaints process, the challenges of making any consumer reporting system accessible to all consumers and the lack of an existing infrastructure to support a consumer adverse event reporting system.


Consumers can contribute unique safety information

Involving affected consumers in adverse events review and learning processes can provide ‘missing’ safety information. This is because consumers occupy a unique position spanning the entire care journey – they interact with multiple providers and often across numerous organisations. They may be able to perceive care transition and process issues that occur before, during and after adverse events, and that are not identified by providers.

Systematic reviews and other studies consistently demonstrate that consumers’ experiences of adverse events identify a wider range of contributing factors than those identified by providers. Similarly, qualitative research has found that consumers describe adverse events and contributory factors differently to providers. Consumers more frequently identify the service quality issues that contribute to adverse events, rather than the technical or systems-wide preventable safety issues identified by providers. The most common types of issues identified by consumers relate to communication, continuity and coordination of care, and medication errors.

Involvement in the review and learning process can be restorative

Qualitative research has found that consumers affected by adverse events believe they should be involved in the event review process. Providers who have involved consumers in review and learning describe the process as being empowering for those affected, because it has the potential to help alleviate psychological trauma and maintain or restore consumers’ trust in providers and the system. Open discussions with health care providers can facilitate learning and improve the delivery of safe care.

38 Lang et al 2016, op. cit.
42 Etchegaray et al 2014, op. cit.
practitioners directly involved in an adverse event can provide a forum for affected consumers to voice their experience where they are carefully listened to, given a genuine apology and supported in recovery.44

"Involving consumers has great potential to both meet their needs and improve the quality and safety of health care."45

Box 4: Stakeholder views on the importance of consumer engagement in learning from adverse events

Stakeholders consulted during the Policy review wanted a stronger focus on consumers in the adverse events review and learning process. Many recognised the differences between how consumers and providers define, describe and interpret an adverse event. In particular, they recognised consumers take a longer-term perspective over the whole continuum of the care journey, rather than focusing solely on the event itself.

Feedback from consumers, including the Commission’s consumer network,* emphasised the need to listen to consumers, acknowledge and apologise, and reassure that action has been taken to change the system and prevent the harm occurring again. Consumers also highlighted the need to consider emotional harm and the impact of an adverse event on the consumer and their family and whānau.

* The consumer network is a group of consumers who support the Partners in Care programme, and the Commission more broadly, to increase consumer involvement in New Zealand’s health and disability sectors.


Box 5: Reasons for engaging consumers in learning from adverse events

• Consumers can successfully identify adverse events when they occur, including those not identified by providers.
• Consumers offer a unique perspective on an adverse event, including an integrated view of the system that spans their entire care or support journey.
• Consumer insights into the circumstances of an event can shed greater light on what happened and lead to a deeper analysis of underlying causes.
• Consumers encourage providers to think about alternative perspectives and can provide insights into possible improvements and solutions to prevent further events.
• Involvement in the review of an adverse event can be healing and restorative for the consumer involved.
• It's the right thing to do ~ 'Nothing about me, without me'.

See also Box 11, which describes one provider's experience of engaging with consumers in adverse events review processes.

Challenges

Some of the challenges for consumer engagement in health care and disability support more generally are also challenges for consumer engagement in learning from adverse events. These challenges relate to shifting the culture of care – from a provider-centred mindset, focused on individual services delivered by professionals, to one of integrated, collaborative care – and the practicalities of engaging with consumers. See Box 6.

**Box 6: General challenges for consumer engagement**

**Shifting the culture**
Providers may be concerned that:
- consumer perspectives might differ from their own and lead to unwanted change
- consumers might not have the required knowledge to participate meaningfully
- consumers might lose confidence in the organisation if they learn about challenges with care processes
- consumers may not respect privacy and information confidentiality.

Consumers may be reluctant to engage because:
- they view providers as the experts and feel they should defer to their advice and direction
- they may fear that responsibility and accountability will be shifted to them
- they may feel they do not have the confidence, knowledge and ability to engage
- they may fear that their engagement will be seen as a token gesture and their input not used to make decisions.

**Putting engagement into practice**

- Competing priorities
- High demands on providers at the point of care
- Pressures to increase efficiency
- Inadequate provider time, resources and expertise to support consumer engagement
- Lack of provider and consumer knowledge, skills and experience in consumer engagement
- Lack of diversity in consumers engaged (ie, not representative of populations served)
- Working within the constraints of a consumer’s volunteer time
- Identifying opportunities for meaningful engagement
- Sustaining provider and consumer interest in the work over time
- Bureaucracy and technicalities (eg, sharing information)

Source: Canadian Patient Safety Institute, Patient Engagement Action Team 2017, op. cit.

There are also challenges that relate directly to engaging affected consumers in adverse events review and learning.

Not all consumers want to be involved in a review process because of the potential for further emotional harm and distress, or because they don’t feel comfortable speaking up. Consumers who have been involved in an adverse event may fear that speaking up could damage their relationship with providers, upset staff or compromise the quality of their care. They may find it difficult to confront or challenge providers about
Stakeholders consulted during the Policy review voiced concerns about the confidentiality and sensitivity of adverse events review and learning processes. They emphasised the need for careful procedures and safeguards to protect the interests of both consumers and providers throughout the process.

Stakeholders particularly identified the risk of blame and harm to providers. Preventing such harm requires education and upskilling to give providers the knowledge, confidence and skills for managing consumer input effectively.


For the reasons described above, it can be difficult to engage affected consumers in review and learning processes. Research shows that the most vulnerable consumers (eg, the elderly and those with English as a second language) are most often excluded because they are typically harder to engage. This makes it more difficult to obtain consumer perspectives that are representative of the population and, consequently, safety improvements may not benefit those consumers most at risk. In this situation it can be valuable to have an independent consumer providing a consumer perspective in the review process.

Providers may fear being blamed or that personal complaints will be made against them. They may be sceptical about an affected consumer’s ability to contribute because they believe consumers have limited knowledge of technical/medical aspects of care as well as unfamiliarity with processes or organisational workflow. Providers who have been involved in an adverse event may fear being re-traumatised as a result of the details of an adverse event being shared and openly scrutinised by their colleagues.

To mitigate the risks of damage to consumer-provider relationships and causing further trauma for both parties, the literature emphasises the importance of shifting the focus away from a ‘blame culture’ to a ‘safety culture’. This means supporting both parties equally throughout a review process, encouraging a collaborative mutual-learning approach and building trust with the common goal of enhancing safety. Providers and affected consumers need to be educated about the importance, benefits and challenges of involving consumers in adverse event review and learning and supported to work together.

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50 Ward and Armitage 2012, op. cit.
57 Hrisos and Thomson 2013, op. cit.
Guide to engaging with consumers following an adverse event

Systematic reviews and expert commentary highlight the lack of an agreed theoretical basis or comprehensive framework to guide consumer engagement in adverse events reporting, review and learning processes. However, findings from qualitative research identify factors that are known to be important.

- Consumers affected by adverse events want to be told about the event soon after it occurs, they want to be able to choose their level of involvement in the review, they want follow-up conversations about the outcomes of the review and they want to be emotionally supported.
- Affected consumers value being listened to carefully, having an opportunity to talk to the providers involved in the event and receiving an authentic apology.
- Engaging affected consumers early and in person is best to minimise problems with recalling details of the event and maximise willingness to participate.
- Open-ended questions, or a combination of closed and open-ended narrative approaches, yield richer and more useful responses about an adverse event than narrow, pre-defined categories.

The Commission has developed a stepped guide to engaging with consumers following an adverse event (Figure 1). The eight-step process provides for ongoing, open communication between the provider and the affected consumer, and consumer input to the review.

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60 Etchegaray et al 2014, op. cit.
61 Gujjarro et al 2010, op. cit.
62 Moore and Mello 2017, op. cit.
65 Sutton et al 2015, op. cit.
GUIDE TO PARTNERING WITH WHĀNAU FOLLOWING AN ADVERSE EVENT

1. Invite whānau to share their story.
2. Explain the review process and the key contact for the whānau.
3. Be open to feedback.
4. Honestly communicate all findings and write one report.
5. Provide copies for whānau.
6. Explain the review process and who will be the 'key contact' for whānau.
7. Check that recommendations are implemented and effective.
8. Update the whānau.

WHĀNAU: the consumer/patient and all those they consider family.

Figure 1: Guide to engaging with partnering with whānau following an adverse event
Key steps to consumer engagement following an adverse event (see Figure 1)

Step 1: Inform the affected consumer an adverse event has occurred

Right 6 of the Code of Health and Disability Services Consumers’ Rights gives all consumers the right to be fully informed, that is, to receive the information a reasonable consumer would expect to receive. Consumers have a right to know when something harmful or potentially harmful has happened to them. Informing consumers honestly, fully and in a timely manner is the right thing to do.

Open communication (also referred to as ‘open disclosure’) is a core principle of the Policy – ‘consumers are ethically and legally entitled to truthful and open communication at all times following an adverse event’. Open communication is not a single conversation but a formal, ongoing process involving open discussion between an affected consumer and a provider about an adverse event or near miss. It should continue until the consumer has all the information and support they need.

According to the Health and Disability Commissioner’s Guidance on Open Disclosure Policies, open communication following an adverse event should:

- be timely (usually within 24 hours of the event occurring or the harm or error being recognised)
- be led by the provider with overall responsibility for the affected consumer’s care
- include acknowledgement of the event, an explanation of what has happened and, where appropriate, what actions have been taken to prevent it happening again
- include a sincere apology.

Box 8: The importance of an apology

An apology is the provider’s opportunity to say, ‘We are sorry this happened to you’. It is not about allocating blame for the event but acknowledging the seriousness of the event and the distress it causes. Apologies can bring comfort to the consumer and assist with healing and resolution. An apology may also influence the consumer’s decision about whether to lay a formal complaint.


66 Health and Disability Commissioner 2009a, op. cit.
67 Health Quality & Safety Commission 2017a, op. cit.
69 Ibid.
A consumer (and/or their key support people or representative) should always be informed about an event that has caused them harm (an adverse event). A consumer should generally be informed about an event that could have caused them harm but did not (a near miss). In deciding whether to disclose a near miss to a consumer, providers should consider:

- whether a reasonable person would want to know about the event
- whether an ongoing safety issue exists for the consumer, eg, if a consumer narrowly avoids being given medication intended for someone else with a similar name, it would be prudent to discuss this with them so they are aware of any ongoing safety risk related to a potential name mix-up so they can watch out for this risk in the future
- whether knowledge of the event may be relevant to future care decisions, eg, whether or not to go ahead with the same procedure on another occasion
- whether the consumer is aware of the event – if they are aware there has been a near miss, an explanation may alleviate concerns and maintain trust.

If there is any doubt about whether to communicate a near miss to a consumer, the overarching principle should be applied that, ‘it is seldom reasonable to withhold information about a consumer from that consumer’.

Step 2: Explain the review process to the affected consumer

A key aspect of open communication is providing an explanation of what happened. However, this explanation is often not available until a review of the adverse event has taken place. Early communication between the provider and the affected consumer should include information about the review process, what will be involved, how long it will take, who will be the key contact for the consumer and how the consumer can be involved in the review. The consumer should be updated regularly about the progress of the review.

Affected consumers should be made aware that contributing to the review is voluntary and they should be given a choice about how much they want to be involved. Not all consumers who have been involved in an adverse event will want to be interviewed or provide feedback on the review report.

Step 3: Listen to the affected consumer’s story

All consumers who have been affected by an adverse event (and/or their key support people or representative) should be offered the opportunity to tell their story of the event. Providers should start a review by interviewing the affected consumer, listening to and recording their story of what happened. This should include how the person feels about what happened, what they think may have contributed, how the event has affected them and what they think might prevent the event happening again.

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71 Health and Disability Commissioner 2009b, op. cit.
Step 4: Be open to consumer perspectives in review of the event

The consumer’s story should be given equal consideration with provider perspectives in analysis of the adverse event. One way of strengthening the consumer voice in the event review process is by inviting an independent consumer (see Definitions, Box 1) to be a member of the review team. This person is not an employee of the provider organisation and has not been affected by the adverse event under review. They are on the review team to provide a consumer perspective on understanding what happened and what might be done differently in the future. Box 12 describes two consumers’ experiences of being on adverse event review teams.

Providers should aim for diversity and inclusion when engaging independent consumers to be part of adverse event review teams. This includes those involved reflecting the lived experiences and characteristics (eg, age groups, cultural backgrounds, socioeconomic status, education levels) of the populations served by the organisation. This also means considering and addressing the barriers that prevent different groups from participating by, for example, using a diverse range of engagement methods or culturally appropriate review practices that are sensitive to other worldviews and ways of communicating.72

Some organisations have ‘consumer engagement specialists’. Their role is to liaise between staff, affected consumers and quality improvement specialists to help optimise consumer engagement and support improvement initiatives that stem from review learnings.73 A consumer engagement specialist can act as a go-to person for the affected consumer to help facilitate conversations and provide support throughout the review process. ‘Consumer partners’ can also be useful. They are trained specifically in engaging consumers and are highly experienced in bringing the consumer voice to quality improvement teams.74

Step 5: Check the draft review report with the affected consumer

Providers should give the affected consumer the opportunity to check the draft review report, including findings and recommendations, and provide feedback on it. The affected consumer’s feedback should be given serious consideration. While not all feedback will result in a change to the report, all feedback must be considered, and an explanation provided where feedback does not result in a change to the report.

Step 6: Communicate all review findings to the affected consumer

The affected consumer should be given a copy of the final review report. In line with the principles of honest and full communication, providers should produce one final review report for all, including providers and consumers.

72 Ibid.
73 Ibid.
74 Ibid.
Step 7: Commit to taking action

The provider should commit to implementing any recommendations made, monitor implementation of those recommendations and check that actions taken are effective.

Step 8: Follow up with the affected consumer on actions taken

The affected consumer should be kept updated on actions taken as a result of the review. Organisational governance plays a critical role in this final stage of consumer engagement in review and learning. Governance bodies are responsible for implementing and following up review recommendations and keeping consumers updated on implementation progress.

More broadly, governance bodies have an important influence on, and responsibility for, consumer engagement throughout the reporting, review and learning process. Research shows the attitudes of boards to consumer engagement and consumer-centred care are an important driver of change. Consumer representation on the organisational committees that oversee adverse events reviews would support consumer-centred approaches throughout the adverse event learning process.

*Culturally appropriate review practice*

This is one of six core Policy principles, stating that the cultural viewpoint and practices of affected consumers should be considered throughout the entire open communication, reporting, review and learning process. Box 9 presents stakeholders’ thoughts on culturally appropriate review approaches.

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Box 9: Stakeholder views on culturally appropriate review approaches

Stakeholders consulted during the Policy review emphasised the need to achieve culturally appropriate consumer engagement for key populations, in particular Māori, Pacific and Asian populations. This would help quality improvements to reflect the needs of those most at risk. A range of ideas were discussed for achieving culturally appropriate review processes, including:

- having an independent consumer on the review team who is from the same cultural group as the affected consumer
- having a range of cultural advisors available to contribute to the review where appropriate
- providing cultural support to affected consumers throughout the review process
- using a wide range of review processes and engagement approaches that enable accessible communication with all populations
- considering the cultural perspectives of affected consumers and how these may influence their willingness to participate in the review process.


Box 10 provides expert commentary on engaging with Māori whānau following an adverse event. Many of the ideas presented here are also relevant to engagement with other key populations. For example, the need to recognise our own values and beliefs, the influence of social biases on treatment decisions and outcomes, and the need to be flexible and skillful in responding and adapting to different cultural contexts and circumstances.

Box 10: Hui – a process for rebuilding trust for Māori whānau following an adverse event

(Taima Campbell RN, MHSc (Nsg), PG Dip Bus (Māori Development), Director Hauraki Health Consulting Ltd)

All adverse events are a tragedy. Before we acknowledge and address the factors that contribute to an adverse event for Māori whānau, we need to recognise that Māori are more likely to have a poor experience of many aspects of health care and have less trust in a system that consistently delivers inequitable health outcomes for them.

Inequalities or social injustice is killing people – on a grand scale. The root causes can be found in the ongoing effects of our history of colonisation and, in the words of Dame Tāriana Turia, ‘the systematic damage incurred by decades of institutional racism’. As health professionals, if we are not actively involved in deconstructing racism then we are part of a health system perfectly designed to achieve imperfect results for Māori.

We may not like to think we are causing harm, but the uncomfortable truth is that our implicit and explicit biases and stereotypes regarding Māori may influence our clinical encounters and treatment.

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76 The term ‘whānau’ is used instead of ‘patient’ or ‘consumer’ to describe the individual and collective recipients of health care.
78 www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11721558
decisions, resulting in adverse outcomes for whānau. While cognitive bias features in the literature regarding human factors and the impact on clinical decision-making, implicit ethnic or social biases are rarely identified as a contributing factor in adverse events.

So what corrective actions can we take? The first step, in the words of the late Michael Jackson, is to start with ‘the man (or woman) in the mirror’. Culturally safe practice begins with an awareness of our own values and beliefs, and recognition that people from other cultures may not share them. It means being non-judgemental and respectful in relationships with people whose culture and worldview is different from our own; and being flexible and skillful in responding and adapting to different cultural contexts and circumstances.

When it comes to engaging and communicating with Māori whānau as part of an adverse event process, there is no ‘checklist’, but there are ways that are acceptable to Māori, from simple things, such as pronouncing names correctly, through to applying traditional principles and processes when holding a hui – not a meeting – with whānau.

Hui processes are embedded in the Māori worldview and are a way of Māori coming together on Māori terms. Hui start and conclude with karakia – poetic and metaphorical verses that establish our connection to Te Ao Māori (the Māori world), seeking guidance and wisdom from ancestors. Te reo Māori and tikanga Māori are essential for the hui process, providing an environment where people can express their views freely and frankly in a way that is designed to maintain the mana and integrity of everyone engaging in the discussion. Kaumatua and kuia are the ‘pou’ who provide wisdom and support to enable whānau and health care teams to navigate through hui and the adverse events review process.

Hui are part of the healing process. They are an opportunity for whānau to be heard and for health professionals to listen. Hui are a time for health professionals to acknowledge the mana (the pain/grief) of the whānau and to speak openly and sincerely about the factors that contributed to their loss. Hui are an opportunity to gain consensus on corrective actions to be taken and are a process of public accountability for following these through. Hui and other cultural processes are also a means to support whānau to re-engage with a health system they will undoubtedly need. Hui are a culturally appropriate process for all stages of the adverse events process, including being part of the journey towards rebuilding trust.

Future focus for consumer engagement in learning from adverse events

The focus for the adverse events learning programme over 2017–19 is on introducing the new Policy expectations for consumer involvement in review processes and supporting providers to address these expectations. The Commission will continue to develop and distribute tools and resources to support consumer engagement in reporting, review and learning. In particular, we will focus on tools and resources to support culturally appropriate review practice and independent consumer representation on adverse events review teams.

As consumer engagement becomes increasingly established in New Zealand adverse events review and learning practice, the Commission will also look to gather information on provider and consumer experiences of working together; to learn from adverse events and the impact of this approach on safety and quality across the health and disability system.

79 www.ncbi.nlm.nih.gov/pmc/articles/PMC3993983
Box 11: Involving consumers in adverse events reviews – experiences and learnings from Waikato DHB (Mo Neville, Executive Director Quality and Patient Safety, Waikato DHB)

How Waikato DHB involves consumers in its adverse events review process

The adverse events review process always begins with open disclosure. If the affected consumer is an inpatient, a member of the quality team/review leader goes to the person personally, explains there will be an internal review of what happened and leaves them a leaflet that explains the process. If the consumer has been discharged, he or she is sent a letter as first contact. In both cases, the consumer is given information about the review process, advised who their key contact person is, and invited to share his or her experiences and perspectives over the telephone or in a face-to-face meeting.

The consumer meets with the review team leader, and the review team clinician if possible (eg, a nurse or a consultant clinician), to discuss the adverse event, including exploration of what the consumer thought went wrong, what could have gone better and what outcomes they are looking for from the review. The consumer’s story is recorded and actively considered in all aspects of the review process. The consumer’s is updated on progress at each stage of the review.

After the final review team meeting, review findings and recommendations are written up into a report and a copy of the draft report is provided to the consumer to check for factual accuracy.

The review team leader is the main point of contact with the consumer throughout the process.

The challenges

• Obtaining adequate organisational representation on the review team – clinicians involved in the adverse event can be difficult to engage, because the event and the review process can be distressing for them.

• Finding an appropriate consumer representative for the review team – there are particular skills required to successfully navigate review processes.

• Having consumer representatives on a review panel can be expensive. Waikato DHB tends to engage consumer representatives for the more complex adverse events that involve multiple departments, organisations or multiple DHBs.

• Obtaining consent to share the draft review report with the affected consumer – clinicians and staff can be reluctant to share the draft report and receive feedback on recommendations from the affected consumer.

What works well

Consumer involvement in the review process helps with healing and rebuilding trust in the system. Because the staff involved treat the consumer with compassion, give an apology in person and listen to them in a meaningful way, many consumers do get closure from the process and are less defensive or upset later on.

‘... we talk more about things from a consumer perspective; we have family meetings and we try to get them in for a face-to-face conversation. Things put in writing can seem harsh and hard. Hands being held, actively listening, and meetings, probably mean more to the family...’

Having a consumer representative on the review team:

• helps clinicians see things from another perspective. In some instances, this helps identify things that clinicians wouldn’t otherwise have considered as contributing factors to the event.

‘... spectacularly brilliant to have a lay person on the team. Wouldn’t have said that a year ago... It kept the focus on the consumer throughout the process.’
Key learnings

Having clear processes is important for engaging clinicians and appropriately engaging different types of consumers.

It is important to engage with consumers as early as possible after the adverse event. Early engagement reassures the consumer they can trust the provider to work to prevent the same thing happening to another family.

Box 12: Representing the consumer voice on an adverse event review – consumer representative perspectives (Sheila, Whanganui DHB; Cathie, Waikato DHB)

How do you become a consumer representative on an adverse events review team?

Sheila and Cathie became consumer representatives through quite different routes.

Cathie was asked, by a representative of the consumer’s whānau, to put her name forward for the role of consumer representative. Two people were put forward and the family selected Cathie. She then met with someone from the DHB, who checked that she knew what was involved and had the capacity and capability to perform the role. Due to her professional experience, she had had some previous involvement with adverse events reviews but had never been on a review team.

Sheila is a member of Te Pukaea, Whanganui DHB’s consumer council. One of Te Pukaea’s roles is to represent the consumer voice on the DHB’s adverse events review teams. Most Te Pukaea members have experienced a serious adverse event themselves.

‘We have experience of trauma and some understanding of the frustrations of dealing with a corporate organisation like a DHB.’

What is the role of a consumer representative?

A consumer representative’s role on the review team is usually the same as other team members. They meet to review documentation, interview staff and sometimes meet with the consumer or whānau, with a view to finding out what went wrong and making recommendations for change.

While the task and activities are essentially the same for all team members, a consumer representative makes a unique contribution to the review process. Sheila and Cathie highlighted some of the key areas in which they felt they had a particular role.

• Keeping the consumer and their care, what went wrong and how things can be improved, at the centre of the review process. Constantly reminding the review team why they’re there – not just because of the event but because of what has happened to the consumer and whānau as a result of the event.

‘The consumer and their whānau should be at the centre of the review but can be overlooked amidst all the clinical analysis.’

• Asking the questions the family would want answered, and presenting review information in an accessible way to the consumer and whānau.

‘Consumer representatives see things from the consumer’s perspective and enable there to be a consumer’s voice within the review team.’
‘If we are asking, and health professionals are having to use language that we can understand, then maybe the report will be written in a way that the consumer and their whānau can understand.’

- **Bringing ‘fresh eyes’ to understanding the event.** Asking the basic, but sometimes hard, questions e.g., ‘why was this done?’
  ‘Consumer reps are encouraged to ask the how, what, why, where, who, when questions that the other review team members may already know the answers to, or hadn’t thought to ask because of the knowledge and experience they have within the health environment. We join a review team from our own day jobs and commitments in the community, usually without any prior knowledge of the event.’

- **Looking beyond technical details to the big picture and the human factors in a consumer’s care, such as communication issues, relationship issues and gaps in care.**
  ‘The consumer rep provides a perspective that tells another part of the story, which is to do with humanity, relationships, communication issues. We may see issues between departments, between various people in the hierarchy…’

- **Bringing empathy for the consumer and whānau to the table.**
  ‘You’re given the mandate to be that empathetic person.’
  ‘As community members unfamiliar with the medical world, we can share an understanding of the consumer’s reality, and what it is like to be on the receiving end of the information being communicated by health professionals.’

- **Objectivity.** Consumer representatives aren’t tangled up in professional hierarchies or organisational politics.
  ‘We have no vested interests in the outcome. We’re not trying to protect anybody. We’re not trying to find blame.’
  ‘The presence of a consumer, who crosses all levels of the hierarchy – or doesn’t cross any at all! – encourages everyone in the review team to feel they have a voice, and that their concerns will be listened to.’

- **Adding credibility to the review process.**
  ‘It added weight for the family and probably for other families. It wasn’t a closed shop.’
  ‘A consumer being there just keeps it real for the patient and their family.’

**What are some of the challenges?**

Representing the consumer voice in the review of an adverse event has its challenges. Sheila and Cathie talked about some of the aspects they personally have found difficult.

- **Dealing with challenging and sometimes very sad stories.**
- **Believing you can make a difference to the outcome of the review.**
- **Believing you have a right to question medical processes and the actions of senior medical personnel.**
- **Expectations that the consumer representative will ensure the outcomes the consumer and whānau want from the review are realised.** The consumer representative is there to represent a consumer perspective in the discussion but not to act as a representative for the consumer or whānau per se.
- **Patronising attitudes of some team members towards the consumer and whānau.**
• Significant workload involved with being part of a review team, which often has to be fitted around the consumer representative’s regular job commitments.

• Working within tightly constrained review parameters, e.g., not being able to look at factors outside the DHB care environment.

**What are some of the rewards?**

There are many rewarding aspects to being a consumer representative on an adverse events review team, not least the opportunity to reduce the chance of a similar event happening again. Some of the more rewarding aspects highlighted by Sheila and Cathie include:

• contributing to a final review report that has a strong focus on the consumer and whānau, and recommendations relevant to improving the consumer experience

• identifying contributory factors that probably wouldn’t have been identified by the health professionals on the review team

  ‘I see us as asking questions that actually make a difference. And I know that some of the things I have flagged have actually been significant to the outcome of a review.’

• being able to provide positive feedback to staff on how they dealt with a traumatic event and circumstances

  ‘It is really good to be able to provide staff with positive feedback about processes and things that you can see going really well.’

• supporting staff to share their perspective when they might not otherwise have felt able to speak up

  ‘Sometimes we need to speak up for someone within that hierarchy who doesn’t want to step on someone else’s toes or say what they perceive to be a problem. So our presence can enable that to happen.’

**Box 13: Resources to support involving consumers in adverse event review and learning**


Chapter 3: Reflections on adverse events learning programme and sector activities in 2016–17

Engagement with the wider health and disability sector

Policy review engagement processes have opened the door to many conversations between the Commission and the wider health and disability sector, exploring the potential to align existing provider systems and processes with the national approach set out in the Policy. Adverse events reporting processes are different for each sector and there is a need to understand context so the Policy adds value. An example of an area in which reporting system alignment works well is ambulance services, as described below.

The Commission will continue to support all health and disability services to report and review adverse events nationally. The adverse events review training workshops delivered by the adverse events learning programme team are open to the whole health and disability sector, including non-DHB providers and national organisations.

Ambulance services

As part of their continuous quality improvement activities, ambulance services began voluntarily reporting numbers of adverse events to the Commission in 2012–13.

In 2015 the ambulance sector established an adverse events review group (AERG), with representation from ambulance service providers, the National Ambulance Sector Office – a joint Accident Compensation Corporation (ACC) and Ministry of Health business unit – and the Commission. The AERG meets quarterly with the purpose of improving and aligning adverse events management processes and sharing learnings. An initial focus of the AERG has been the consistent application of the SAC rating scale across service providers, to address variable application of definitions. Using the Policy guidance, the AERG developed a work programme to align definitions across ambulance service providers.

‘The ambulance sector adverse events review group is currently the only example in Australasia where emergency ambulance services have aligned their adverse events reporting systems to enable national public reporting.’ – David Waters, Chief Executive, Council of Ambulance Authorities and Ambulance New Zealand

The work of the AERG is an excellent example of how different organisations can work together, across business, reporting and accountability boundaries, for the common purpose of learning and improving consumer safety. The AERG adds considerable strength to the adverse events reporting, review and learning processes in the ambulance sector through this open, collaborative process.

The ambulance sector has participated in the Commission's learning from adverse events training workshops, with 40 ambulance sector staff attending training to date. Recent training workshops have included presentations from St John New Zealand describing the system changes made by St John to improve reporting and response to adverse events.
Private surgical hospitals

The New Zealand Private Surgical Hospitals Association (NZPSHA) has reported high-level, aggregated data on adverse events occurring in member organisations to the Commission since 2012–13. This data is based on clinical indicators the NZPSHA requires all member organisations to submit.

The Commission provided feedback on the clinical indicators as part of the NZPSHA’s update process. SAC rating definitions used in the Policy are now being used within the NZPSHA’s clinical indicators reporting process to rate severity of outcome. We also met with the NZPSHA as part of the Policy consultation process and continue to work with the Association to align reporting definitions. Private surgical hospitals have a broader range of cases classified as a SAC 1 than DHBs but are working towards being aligned with the national Policy and processes by the first quarter of 2018.

Some private surgical hospitals voluntarily engage with the Policy and report SAC 1 and 2 rated adverse events openly to the Commission, including sharing detailed review learnings. These reports add to the body of knowledge the Commission uses to develop and share learnings nationally.

See Chapter 5 for more on private surgical hospitals and the NZPSHA.

Age-related care

A small number of age-related residential care providers have been voluntarily reporting adverse events to the Commission since 2012–13. We will continue to build on existing relationships and work with this sector to support national reporting and learning.

Disability services

Some disability service providers have also voluntarily reported adverse events to the Commission since 2012–13. In 2016–17 we met with the New Zealand Disability Support Network and disability support services to discuss how the Policy can be applied to meet the needs of this sector and what support might be needed.

Primary care

There has been good engagement from the primary care sector in 2016–17, particularly as part of the Policy consultation process. These conversations have continued following the release of the updated Policy.

The Commission presented on the updated Policy at the Royal New Zealand College of General Practitioners’ conference and the Practice Managers and Administrators Association of New Zealand conference. Some primary health organisations (PHOs) have expressed interest in aligning their existing processes with nationally consistent Policy processes. There is also some interest in undertaking pilot work in PHOs that have not previously reported adverse events.
Learning from adverse events workshops

The Commission has delivered 10 learning from adverse events workshops since 2015, with a total of 424 sector staff attending the two-day events. Participants are increasingly from non-DHB parts of the health and disability sector, reflecting broader, cross-sector engagement with the Policy and practices, as shown below.

Figure 2: Learning from adverse events workshop attendance, by sector, 2015–17

Professor Erik Hollnagel: From Safety I to Safety II – building resilience in health care in New Zealand

In 2017 the Commission hosted Professor Erik Hollnagel to facilitate a one-day masterclass on a modern view of safety, Safety II and resilience engineering, and building resilience in health care. The event was attended by 120 people.

Professor Hollnagel is an internationally recognised specialist in the fields of resilience engineering, system safety, human reliability analysis, cognitive systems engineering, and intelligent man-machine systems. He is the author of more than 500 publications including 22 books as well as journal articles, conference papers and reports.

Professor Hollnagel’s sessions were followed by short presentations on Safety II in New Zealand practice and the management of safety and performance in non-health care settings. Following the presentations, attendees workshoped questions on examples of Safety I and II approaches in their own practice and opportunities to strengthen Safety II practice.

The event took place at Ko Awatea in South Auckland and was sponsored by Fisher & Paykel Healthcare and the National Rural Fire Authority.

The conference included a workshop with the sector, to gauge current and emerging Safety II practice in New Zealand. The feedback received will be shared with participants and inform the Commission’s future direction.
Dr Carl Horsley, an intensivist at Middlemore Hospital, provides his reflections on Professor Hollnagel’s workshop, in Box 14 below. Further information on Safety II and resilience engineering is available at: http://resilienthealthcare.net/books-papers-etc.html.

Box 14: Reflections on Safety II – a view from the front line
(Dr Carl Horsley, Clinical Head, Critical Care Complex, Middlemore Hospital)

The masterclass with Professor Erik Hollnagel was a rare opportunity to hear about a new view of safety from one of the leading thinkers in safety science. Professor Hollnagel’s presentation explored the history of safety thinking and how our traditional views on adverse event causation have limited our understanding about how safety is really created in complex systems such as health care.

In our dynamic, complex and highly interdependent health care system, staff are constantly adjusting to meet the often competing demands they are faced with. This ‘work-as-done’ by staff is often very different from the ‘work-as-imagined’ by those removed from the front line, but it is this ability to adjust that usually keeps the system working and creates successful outcomes.

In the ‘new view’, which Professor Hollnagel calls Safety II, safety is not just the absence of adverse events; it is a condition where the number of successful outcomes is as high as possible. It is achieved by trying to make things ‘go right’ as much as possible. Our focus must shift from just trying to prevent rare failures through constraint to also thinking about how we can create the conditions that support successful performance.

However, any new model is only useful if it enables us to make practical progress in areas where this has previously been difficult. With this in mind, we wish to share some of the practical lessons we have learnt from applying a Safety II perspective to our work in the Critical Care Complex at Middlemore Hospital over the last four years.

Learn from all events

Traditionally, we only pay attention to things when they go wrong. In the context of Safety II thinking, this approach is often referred to as ‘Safety I’. We spend a large amount of resource understanding what went wrong but very little resource understanding why things go well, so often. However, if we shift to thinking of safety as an active state, then learning how things usually go well becomes vital. For us this has meant building debriefing and reflection into all significant clinical events (including when they went well), to make explicit and value how our teams achieved a good outcome, even when things didn’t go to plan or new challenges arose.

‘Unlike the instantaneous, negative and often publicised response to an adverse event, the consistent delivery of well-executed safe care under typically difficult circumstances tends to go unnoticed.’

When we were trying to understand adverse events, we changed the question from ‘why didn’t you follow the rules?’ to instead asking ‘why did that seem the right thing to do at the time?’ People usually were doing what had worked for them many times before, only that time it didn’t. We wanted to understand if other staff might find themselves in the same situation and take the same action. This change in focus gave us a much deeper understanding about ‘work-as-done’ by the front line, and how this was shaped by the various demands and constraints within which they work. This does not change our responsibility to individuals harmed, and to review and learn from adverse events. It means...
changing the way we approach a review, so learning can be enriched by understanding the full context.

In short, the Safety II approach encompasses learning from adverse events and broadens previous approaches to maximise opportunities to learn.

**Make usual success more likely**

Often, our responses to adverse events involve writing more rules or adding further barriers to failure. However, these rules are often a poor match to the clinical realities of everyday work and may inadvertently make daily work more complex or difficult, creating new and unforeseen risks.

A Safety II viewpoint looks at how we can best support successful practice by understanding ‘work-as-done’ and the constraints and demands in which people do everyday work. For example, in our work to improve hand hygiene performance rates we changed from a ‘compliance’ model to one based on understanding the workflows and competing priorities faced by our staff. We were struggling to improve our performance despite continued effort in this focus area. Working with the infection prevention and control specialists, we designed an approach that fitted the context of our work. Using this, we saw our hand hygiene performance rate improve to exceed the national threshold, and have sustained this for over 18 months. We achieved the result we wanted with an approach based on a better understanding of everyday work.

**Build resilient teams and systems**

In this setting ‘resilience’ refers to the ability of the system to maintain operations over both expected and unexpected conditions. It is the ability to constantly adjust, whether to the individual situations of patients or to the changing demographic or disease patterns we see.

Professor Hollnagel describes the four key components of resilient performance as the system’s capacity to anticipate, monitor, respond and learn. We built these concepts into a new framework, which articulates the approach to teaching and embedding teamwork and human factors principles in our work in the Critical Care Complex. We have embedded this into our service using an in-situ simulation programme. We have seen marked changes in our unit, with high reported levels of staff engagement, improved team performance and a focus on anticipating both threats and opportunities in our work.

**Conclusion**

Safety II represents a ‘change of lens’ in how we think about safety. It reframes safety as an active state, it sees people as the key resource needed to deal with complexity and it focuses us on thinking about how we can create conditions that enhance successful performance. In our experience, it has been a transformational change that helps us make progress with many of the most challenging problems of health care.

Open Books

Since Open Book reports were first developed in 2014 as a resource for sharing learnings from adverse events reviews, a total of 22 have been published. The Commission acknowledges the organisations involved for their commitment to learning from adverse events and for sharing their cases with the wider sector.

Open Book reports alert providers to the main findings of adverse events reviews. The reports are short and emphasise changes implemented by a provider to stop a similar event happening again. The accessibility of the Open Book format, using information directed to particular services, allows lessons learned to be shared quickly between organisations. Providers are encouraged to consider Open Book learnings and whether the changes made are relevant to their own local systems.

The Commission continues to encourage organisations to share their review learnings through Open Books. We are refining our Open Book development processes to enable more rapid turnaround and publication of shared learnings. A new shared learning template enables organisations to share learnings from review of any adverse event they consider to have national learning value. These events do not have to be SAC 1 or 2 rated, but could relate to learnings from review of near miss or SAC 3 or 4 events, or clustered event review. The shared learning tool can also be used by organisations that have not previously reported adverse events.

Trigger tools

Trigger tools are a simple, cost-effective methodology that have been widely used in hospitals and general practices to identify, quantify and track patient harm in order to improve the quality and safety of services provided.

The Commission’s trigger tool programme began in 2012 with a focus on establishing the global trigger tool (GTT) as part of a suite of tools hospitals would use to identify patient harm. The GTT was developed by the Institute for Healthcare Improvement (IHI) and is used internationally as an approach to identifying and documenting patient harm. In New Zealand, trigger tools are being used by a number of hospitals, and a primary care trigger tool has been trialled by a number of primary care practices in the Auckland region.

As one of several approaches to measuring patient harm in health care, the trigger tool programme was re-positioned in 2015–16 to sit within the adverse events learning programme. The move reflected the understanding there is no single methodology for measuring patient harm in health care and that we need to understand harm from multiple perspectives, including those of consumers.

While the Commission continues to support trigger tools as part of a suite of tools DHBs and primary care practices can use to understand harm, it no longer provides formal support for the trigger tool programme specifically, focusing instead on broader approaches to harm measurement.

A number of DHBs have continued to use the GTT. These DHBs recently participated in a study that focused on evaluating medication-related harm from a national perspective. The study highlights the value of using a systematic approach to not just count harms, but to characterise the types of harm, and to use this information to prioritise quality improvement efforts.

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84 www.ihi.org/resources/Pages/Tools/IHIGlobalTriggerToolforMeasuringAEs.aspx
Adverse events learning programme expert advisory group

The adverse events learning programme expert advisory group (EAG) was formed in 2013 to provide strategic direction and guidance to the programme team and the sector. The EAG comprises respected leaders who are experts in their respective fields, and/or offer useful perspectives from a range of sector interests or groups. Membership includes consumers, clinicians, Māori, primary health care services, DHBs, private health and disability service providers, quality and risk expertise, expertise in review methodologies and frameworks, and safety systems expertise.

Many EAG members have been with the EAG since the early days of the adverse events learning programme and have helped steer the programme to realise the successes achieved to date. However, a lot has changed in the adverse events reporting and learning landscape since the initial establishment of the EAG, reflecting a growing focus on the wider health and disability sector and consumer engagement. The EAG’s terms of reference have been updated to reflect these developments.

These developments, combined with the conclusion of some members’ terms, have resulted in a number of changes to the EAG membership. We would like to acknowledge and thank the following departing members for their longstanding and invaluable contributions to the adverse events learning programme and adverse events review and learning systems more generally:

- Dr David Sage
- Dr Colin McArthur
- Cristina Ross
- Gillian Robb.

In looking at what expertise was required to drive the next stage of work of the adverse events learning programme, particularly embedding the updated Policy, the EAG determined there were some core and some additional skills and expertise needed in the group. Accordingly, a process is underway to appoint a Mātauranga Māori member, a primary care sector member and a quality improvement and patient safety member. Future EAG discussions will be further enriched by the knowledge, networks and experience these new members will bring.
Chapter 4: Learning from adverse events reported by DHBs

The numbers reported in this chapter are based on reporting requirements set out in the 2012 Policy.\textsuperscript{86} They reflect DHBs’ interpretation of the Policy and related reporting decisions, as discussed in the executive summary. The adverse events classification and reporting process is described in Appendix A.

Adverse events reporting is not a reliable way of demonstrating change; the point of these reports is to learn from events and identify opportunities for improvement. Commentary focuses on insights, lessons learned and emerging issues (rather than total numbers and year-on-year comparisons). This is consistent with the continuing emphasis on the learning, recommendations and implementation of actions that occur as a result of the review process, as emphasised in the updated Policy.

This chapter provides information on adverse events reported by DHBs and provides some further breakdown of emerging themes from reporting. Much of the information is based on initial notification information only, which limits the ability to offer detailed analysis as reviews take time to complete and share with the Commission. It is important to note that, in some categories or classifications, the numbers are small. Caution must be applied in interpretation of small numbers of events.

<table>
<thead>
<tr>
<th>Adverse event category</th>
<th>Event code</th>
<th>Reported DHB adverse events 2016–17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical administration</td>
<td>01</td>
<td>21 (4%)</td>
</tr>
<tr>
<td>Clinical process/procedure</td>
<td>02</td>
<td>252 (46%)</td>
</tr>
<tr>
<td>Documentation</td>
<td>03</td>
<td>2 (0%)</td>
</tr>
<tr>
<td>Healthcare associated infection</td>
<td>04</td>
<td>16 (3%)</td>
</tr>
<tr>
<td>Medication/IV fluids</td>
<td>05</td>
<td>19 (3%)</td>
</tr>
<tr>
<td>Blood/blood products</td>
<td>06</td>
<td>0</td>
</tr>
<tr>
<td>Nutrition</td>
<td>07</td>
<td>3 (1%)</td>
</tr>
<tr>
<td>Oxygen/gas/vapour</td>
<td>08</td>
<td>0</td>
</tr>
<tr>
<td>Medical device/equipment</td>
<td>09</td>
<td>8 (2%)</td>
</tr>
<tr>
<td>Behaviour</td>
<td>10</td>
<td>Reported in Office of the Director of Mental Health annual report</td>
</tr>
<tr>
<td>Patient accidents</td>
<td>11</td>
<td>2 (0%)</td>
</tr>
<tr>
<td>Falls</td>
<td>12</td>
<td>210 (39%)</td>
</tr>
<tr>
<td>Infrastructure/buildings/fittings</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Resources/organisation/management</td>
<td>14</td>
<td>9 (2%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>542</strong></td>
</tr>
</tbody>
</table>

Note: Clinical management event group consists of codes 01, 02 and 14.

\textsuperscript{86} \url{www.hqsc.govt.nz/assets/Reportable-Events/Publications/Reportable-Events-Policy-Final-Jan-2013.pdf}
In 2016–17 there were no events reported to the Commission under the codes 06 (blood/blood products), 08 (oxygen/gas/vapour) or 13 (infrastructure/buildings/fittings). Code 10 behaviour events relating to mental health service users are reported separately through the Office of the Director of Mental Health’s report, which is scheduled for publication later this year.

**Learning from clinical management events and emerging themes**

Clinical management events were the most common event type reported (282 events, representing 52 percent of all adverse events reported by DHBs to the Commission). This group is aggregated from three individual event codes (01, 02 and 14), all representing adverse events that occur in or impact on the clinical environment.

The clinical management events can be further classified to provide clinical context (see Table 3). Determining these sub-classifications is wholly dependent on the information available from providers (reported through Adverse Event Brief (AEB) Parts A and B forms), but gives a general indication of types of clinical events. The complexity of health care means that, for any adverse event, there may be more than one potential underlying cause. As a result, the principal category selected is subjective and may not reflect all contributing causes. For these reasons the numbers shown in Table 3, and subsequent commentary, must be considered with caution.

Commentary is provided on delayed diagnosis and pressure injury events, as they represent the two largest sub-groups of clinical management events (70 and 51, respectively). Retained item and wrong patient/site/side/treatment/procedure events are discussed, as they are now part of the new Always Report and Review list in the updated Policy.
Table 3: Clinical classification of clinical management events, 2016–17

<table>
<thead>
<tr>
<th>Clinical management event description</th>
<th>No of events</th>
<th>Example (hypothetical)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delayed diagnosis or treatment</td>
<td>70</td>
<td>Issue in referral process resulting in delay seeing specialist</td>
</tr>
<tr>
<td>Assessment and diagnosis</td>
<td>20</td>
<td>Initial assessment did not find the key clinical issue</td>
</tr>
<tr>
<td>Resources/organisation/management</td>
<td>9</td>
<td>Insufficient clinic/equipment/staff/appointments to meet demand</td>
</tr>
<tr>
<td>Deterioration</td>
<td>26</td>
<td>Consumer deterioration not recognised or managed in expected timeframe</td>
</tr>
<tr>
<td>Complication</td>
<td>27</td>
<td>Complication of treatment/procedure (eg, stroke following surgery)</td>
</tr>
<tr>
<td>Retained item</td>
<td>17</td>
<td>Item left inside wound beyond expected time</td>
</tr>
<tr>
<td>Pressure injury</td>
<td>51</td>
<td>Pressure injury from insufficient position change/nutrition, etc</td>
</tr>
<tr>
<td>Adverse outcome</td>
<td>25</td>
<td>Unexpected consumer/patient death/outcome</td>
</tr>
<tr>
<td>Clinical process</td>
<td>8</td>
<td>Incomplete process during care (eg, consent, coordination of care)</td>
</tr>
<tr>
<td>Wrong patient/site/side</td>
<td>8</td>
<td>Wrong consumer/patient in procedure room/theatre</td>
</tr>
<tr>
<td>Monitoring</td>
<td>7</td>
<td>Inadequacy of monitoring (eg, breathing rate after morphine given)</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>Security issue</td>
</tr>
<tr>
<td>Treatment</td>
<td>2</td>
<td>Allergic reaction to products used for treatment</td>
</tr>
<tr>
<td>Transfer</td>
<td>9</td>
<td>Harm related to transfer of care between services or providers</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>282</strong></td>
<td></td>
</tr>
</tbody>
</table>

There is a short timeframe between the closing date for reporting and confirming with DHBs, through a reconciliation process, the adverse events totals for inclusion in this report. As the review process takes time, much of the learning relating to emerging themes is not known at the time of publishing. Any learning from further analysis and discussion will be updated in subsequent reports and through Open Book reports.

**Ophthalmology adverse events**

The 2015–16 *Learning from adverse events* report identified increased reporting of adverse events in ophthalmology services and delays in access and follow-up care. However, underlying contributory factors were not known at the time of reporting. An update is provided below on the learning and action that followed review of these events.

Following the focus provided in the 2015–16 report, there have been 30 new ophthalmology events reported in 2016–17. This includes some retrospective reporting of events that occurred prior to 2016–17 (included in this report so affected consumers are counted).
Update: Ophthalmology service improvement

Adverse outcomes experienced by a number of ophthalmology patients were reported to the Commission in 2015–16. This reflected pressures from increasing demand in a number of DHB ophthalmology services. Across the country there were varying approaches to manage this, including different processes, systems, planning and models of care. In order to support the improvement of access to eye health for New Zealanders, the Ministry of Health (the Ministry) made available a contribution of $2 million nationally to assist DHB teams to develop, implement or improve models of care to best support their local population. In addition to the local DHB actions, key national improvements in service planning and patient flow are being developed.

Local DHB activity

In discussion with the Royal Australian and New Zealand College of Ophthalmologists and the New Zealand Association of Optometrists, contracts for service improvement activity using the $2 million additional funding was agreed with 17 providers covering 19 DHBs. Funding decisions considered how well the proposed activities would support the implementation of sustainable solutions.

Service improvement activities being undertaken included a mix of clinical, process and infrastructure initiatives.

Regular monitoring of recovery actions to reduce waiting times forms a core part of the contracting with each DHB. Information is now being collected nationally on the number of patients waiting for follow-up appointments. The latest national figures show the previously increasing trend of patients waiting too long for follow-ups has been reversed, and there has been an approximate 20 percent reduction in these numbers in the last few months. This reflects that the service and system improvements are starting to have an impact. This will continue to be monitored.

Nationally led activity

In parallel to local activities, a national ophthalmology EAG of key stakeholders was established by the Ministry. This group advises on improvements that should be nationally coordinated. The new EAG has held two meetings (July and August 2017) and meets again in November 2017.

Work has started to update national guidelines for age-related macular degeneration and glaucoma, and to develop targeted support to improve ophthalmology services production planning processes.

The EAG has also continued the development and testing of an updated non-cataract ophthalmology clinical prioritisation tool.

At this point in the process we have seen a willingness of the various clinical groups, DHB management and the Ministry to participate in an active response to the pressures facing ophthalmology services and to work collaboratively on solutions. Although there is much work still to be done, we are confident plans across the sector will have positive outcomes for patients and eye-health services, but acknowledge the service improvements will need to be well embedded so the changes are sustainable.

The Ministry’s electives and national services team continues to support this work.
Update: Ophthalmology at Southern DHB

Knowing that people in the community had experienced sight loss was both the reality and the responsibility that Southern DHB faced last year. The adverse events relating to our ophthalmology service resulted from delays in timely follow-up and treatment.

In recent years, our ophthalmology service had experienced a significant increase in the number of people needing support in managing their chronic eye conditions (such as diabetic retinopathy, glaucoma and macular degeneration). The increase in demand was driven by both an ageing population and the availability of new treatments, such as Avastin injections. These treatments offered benefits for conditions that were previously difficult or impossible to treat, but did require frequent follow-up appointments. Southern DHB’s ophthalmology system of care was unable to keep up with this increase.

‘Our systems, quite simply, failed to cope.’ – Chris Fleming (Southern DHB Chief Executive)

Acknowledging the serious problems within the service included admitting this to our community. In October 2016 we wrote to 4,618 people who were overdue for appointments. We apologised for the delays, let them know of the options available to them, and established a hotline with trained staff who could respond to their questions.

We also established a quality improvement project team with two areas of focus. The first was an immediate focus to see with urgency those waiting the longest. The second was a focus on service changes that would allow ophthalmology to manage the increasing demand into the future.

In addition, we asked experts from New Zealand to undertake an external review of our service. Their input was enormously valuable in teaching us as much as possible about this very difficult situation, and was in the interests of preventing further harm to those in our care.

As a result of the external review and quality improvement project, changes to the service have included:

- increasing capacity
  - using locum specialists, and employing an additional ophthalmologist
  - employing an optometrist
  - training registered nurses to become Avastin injectors
- changes to models of care
  - patients referred to GPs for repeat prescriptions
  - health care assistants performing visual acuity assessments
  - optometrists and nurses providing assessments and treatments where appropriate
- improving systems
  - standardising our reporting systems and criteria for when a patient is overdue, to better understand the number of people waiting
  - using tools and clinical guidance to identify high-risk patients whose follow-up cannot be delayed
  - review of the clinic environment and workflow.

The review commended Southern DHB for the culture of reporting, leading to a wider range of cases being considered.

As a result of this work, and with the dedicated effort of our teams, there has been a significant reduction in the numbers of those initially identified as overdue for follow-up appointments in October 2016.
As demand for these services continues to increase, work must continue to stay ahead of the challenge. This will require ongoing vigilance and openness to new ideas.

While concerted efforts have been made to improve the service, Southern DHB Chief Medical Officer Dr Nigel Millar’s thoughts remain with those patients whose experiences were at the centre of this review. ‘This was an unacceptable situation and we apologise for our failure to deliver the care they were entitled to.’

Nurses upskill to help save sight

As age-related eye diseases increase in New Zealand, so does the demand to treat them – a challenge Southern DHB is embracing by offering specialist training in ophthalmology to nurses.

Sarah Woods (pictured left), Registered Nurse in Ophthalmology Outpatients at Southland Hospital, and Liane Matthews, Registered Nurse at Dunedin Public Hospital Outpatient Eye Department, commenced their specialist training in February 2017.

‘This is an amazing opportunity and an exciting time for nurses to help pave the way for the future of ophthalmology,’ says Sarah. ‘By becoming an Avastin nurse injector, it will take some of the pressure off the ophthalmologists, freeing them up to do other clinics and reducing patient waiting times.’

Avastin is a drug used to treat wet age-related macular degeneration (AMD), diabetic eye disease and other problems of the retina. It blocks the growth of the abnormal blood vessels and is injected into the eye to help slow vision loss from these diseases.

‘Since its introduction, Avastin treatment has resulted in significantly reduced referrals to the Blind Foundation NZ. This is great news as AMD is a growing problem in New Zealand, with a total prevalence predicted to be over 200,000 by 2018,’ says Liane.

Training to become an Avastin nurse injector has included attending lectures by Consultant Ophthalmologist Dr Nicholas Johnston and shadowing ophthalmologists in their clinics to learn how to do patient assessments, read eye scans and inject. Sarah is now completing postgraduate nursing study at the University of Otago.

‘The extra work has been worth it,’ says Sarah. ‘I really enjoy the rewarding nature of this speciality. Sight is so valuable, and it’s wonderful to see people who have had very poor vision doing what they enjoy again after treatment.’

Themes emerging from 2016–17 adverse events reporting

Perinatal and maternal adverse events

There has been an increase in reports relating to adverse events occurring in the perinatal and maternal period, with 34 events reported by DHBs in 2016–17. These events are classified into a range of categories listed in Table 3 (see page 40), dependent on the amount of information reported.
Adverse events included in this report represent a small proportion of perinatal and maternal mortality and morbidity reported to the Perinatal and Maternal Mortality Review Committee (PMMRC) and the Maternal Morbidity Working Group (MMWG). Information from these 34 events is used by the PMMRC and MMWG to capture all cases and related information for inclusion in their review and reporting. Review of these cases can also support review teams to identify underlying system-contributing factors.

**Delays in diagnosis, treatment, referral and follow-up**

Delayed diagnosis or treatment is a broad category that includes delays in referral and follow-up by specialty services. There was reporting in all four of these areas, from different specialities and different DHBs. Two clusters of reports were noted under this broad category.

- There were 30 reported events relating to cancer or suspected cancer. The majority of DHBs reported events in this area. At the time of reporting, not enough reviews had been received by the Commission for these events to be analysed in-depth. We will continue to monitor this category and share relevant learnings. This is an area the Health and Disability Commissioner has also previously reported on.87
- There were 24 events relating to ophthalmology, from a number of DHBs.

**Retained items**

There were 17 adverse events reported relating to retained items: eight in maternity or gynaecological theatre settings and the rest relating to other surgery, wound care or interventional radiology services.

Retained items is an area of focus for the Safe Surgery NZ programme,88 helped by the use of the paperless, surgical safety checklist. Better teamwork and communication in operating theatres is a key element of the MORSim training simulation programme currently being rolled out by the University of Auckland, funded by ACC and supported by the Commission. There have been two previous Open Book publications relating to retained items: Preventing retained items90 and Retained vaginal swabs following childbirth.91

**Wrong patient/site/side/treatment/procedure**

There were eight events reported in this category, six of which occurred outside the expected operating theatre environment. While there has been a focus on processes and checklists in operating theatres, this is less routine in other areas where procedures and investigations occur. As a result, an Open Book, Under the radar: Interventions or procedures performed outside operating theatre settings – wrong procedure/wrong site/wrong person, on this topic has been published.92

**Improvements in reporting – pressure injuries**

There has been an increase in the reporting of pressure injury adverse events, from an increasing number of DHBs. This is demonstrated in Figure 3.

The harm from pressure injuries can be devastating not only for the individual but also for the family and whānau. Evidence shows that most pressure injuries are preventable. A number of patient stories have been developed to demonstrate the impact of pressure injuries.93

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89 www.morsim.ac.nz
The increase in DHB reporting of pressure injuries may reflect the focus of work undertaken by the Ministry, ACC and the Commission, which has involved: raising awareness of the problem; sector engagement in identifying what assistance is needed to address these treatment injuries; education and profiling through Stop PI Day; and the development of foundational resources for the sector. The 2014–15 Learning from adverse events report, also called on providers to start reporting Stages 3 and 4 pressure injuries.

Guidance for the reporting of serious pressure injuries (Stages 3, 4 or unstageable) is included in the SAC rating and triage tool\(^{94}\) and the SAC examples table\(^{95}\) which support the updated Policy.

*Figure 3: Pressure injury adverse events reported by DHBs, 2012–13 to 2016–17*

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Learning from falls events and the reducing harm from falls programme

At the time the Commission was established in 2010, falls in hospitals accounted for 34 percent of reported adverse events. Due to the significant impact on patients, families and whānau, we made reduction of harm from in-hospital falls a high priority.

![Figure 4: Serious harm from falls events, 2009-10 to 2016-17](image)

In 2016–17, 210 adverse events reported by DHBs related to harm from falls, making up 39 percent of all adverse events reported. Of these, 77 resulted in the patient suffering a hip fracture (Figure 4). These serious events are closely reflective of those captured in the national hospital administrative data (the National Minimum Dataset).

The Commission recognises the tremendous effort across the sector in achieving an ongoing improvement in falls figures; reducing harm from falls is not easy to achieve and sustain as there is no single solution. Our reducing harm from falls programme has highlighted the importance of staff working in partnership with patients and their families and whānau to understand the individual patient risk factors and implement prevention strategies that are effective for that particular patient.

This year, the adverse events learning programme collaborated with the falls programme to develop an Open Book entitled *Reviewing patient falls: What can we learn?* to supplement April Falls activities. The important learnings were:

- review incidents of falls to fully understand why that particular patient fell
- apply those learnings and make changes to the care plan to try and prevent the next fall
- recognise cognitive impairment, provide close care and do not use bedrails for those suffering from confusion
- talk to the family and whānau and listen to what they have to say
- work in partnership with the patient and their family and whānau to keep the older patient safe.

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97 www.hqsc.govt.nz/our-programmes/reducing-harm-from-falls/april-falls
Improvements in healthcare associated infection adverse events reporting

There has been an increase in the reporting of adverse events relating to healthcare associated infection, across a number of DHBs (16 in 2016–17, up from 3 in 2015–16). For the first time, there has been sufficient reporting to warrant inclusion of healthcare associated infection as a distinct event category (Appendix A). Numbers are still low, but may represent an improvement in reporting culture.

The increase may also be the result of the implementation and spread of the Surgical Site Infection Improvement Programme, in addition to the implementation of *Staphylococcus aureus* bacteraemia reporting as an outcome marker for the Hand Hygiene New Zealand programme. There is also updated guidance encouraging the reporting of healthcare associated infection according to the harm definitions outlined in the SAC examples table (released to support the updated Policy).

The additional reporting and review of these adverse events by multidisciplinary teams will increase attention given to review and lead to further improvements for preventing similar events.
Chapter 5: Learning from adverse events reported by non-DHB providers

The updated 2017 Policy is intended to be relevant to all health and disability services who wish to use it to support patient safety and quality improvement systems and processes. The Commission encourages and welcomes reporting from across the sector.

A total of 86 adverse events were reported to us in 2016-17 by non-DHB providers.

Private surgical hospitals

The NZPSHA represents the interests of private surgical hospitals. Twenty-seven organisations are members, responsible for 39 hospitals. NZPSHA members provide procedures for approximately 171,000 consumers/patients every year, representing a significant proportion of all elective surgery performed in New Zealand.

A requirement of NZPSHA membership is involvement in the reporting of clinical indicators (including adverse events). The Injury Prevention Research Unit of the University of Otago analyses this data and reports back to member organisations without identifying individual providers, other than providers’ own figures. The clinical indicator information is used internally, at members’ hospitals and the NZPSHA, and aggregated data is shared exclusively with the Commission annually. Member organisations are able to utilise the data for benchmarking and driving internal quality improvement initiatives.

‘The NZPSHA commends the Commission on its work to improve the quality of care with the sector. The NZPSHA and its members continue to work with the Commission, ACC and other stakeholders to improve reporting and transparency to enable further reductions in patient harm and to promote a culture of quality improvement across the sector.’ - Dr Lloyd McCann and Philippa Pringle, NZPSHA Executive Quality, Workforce and Digital Co-leads

Between 1 July 2016 and 30 June 2017, the NZPSHA reported 52 aggregated SAC 1 or 2 incidents from 171,359 admissions. The rates are reported per 1,000 admissions for all participating NZPSHA member hospitals. This figure cannot be compared directly with DHB-reported events because the reporting criteria differ. Private surgical hospitals have a broader range of cases classified as SAC 1 than DHBs, but are working towards being aligned with the national Policy and processes by the first quarter of 2018.
Learning story: MercyAscot uses complications and adverse outcome reporting data to drive quality improvement

MercyAscot Hospitals have been using technology and systems software to provide data on complications and adverse outcomes to frontline clinical leaders. ‘Qlikview’ Business Intelligence Visualisation Tools is the software package MercyAscot uses, implemented with support from Qlikview re-seller Acumen Business Intelligence.

‘Qlikview has put critical information in the hands of our charge nurses and other clinical leaders at the click of the mouse button. Our people are able to track trends and use the data to inform decisions about quality improvement initiatives before assessing the impact of these initiatives’. – Dr Geoff Sparkes, MercyAscot Chief Executive

MercyAscot created a quality process and outcomes dashboard with Acumen using the Qlikview tool. The dashboard gives clinical leaders near-real-time access to complications, adverse outcome and incident data in an easy-to-review format. Teams are able to review the data using a number of filters including specialty, site, complication or adverse outcome category.

‘Giving people access to the data has sparked some lively discussions and debate, which has ultimately led to positive changes being implemented to improve patient care. We’re not 100 percent there yet, though. We’ll continue to refine and build more dashboards in the future that will provide our teams with insights to improve the care we offer our patients.’ – Sarah Gardner, Project Lead and Medical Services Manager

Ambulance services

There were over 506,000 ‘111’ calls for ambulance services in 2016–17, which is a 5 percent increase in calls from 2015–16.

In last year’s Learning from adverse events report, the ambulance sector had started applying a broader approach to quality improvement and a push to identify and learn from adverse events, which resulted in a significant increase in reporting. As processes and systems were developed and refined, the sector worked in collaboration with the National Ambulance Sector Office (NASO) and the Commission to align with the national Policy and standardise the approach to reporting.

There were 28 adverse events reported by ambulance services in 2016–17, a decrease from 101 events in 2015–16. The Commission has been working with ambulance services and the NASO to standardise application of the Policy and consistency of adverse events reporting practices between service providers. These process improvements have resulted in a decrease in reporting, which is likely to be a more accurate reflection of harm in this sector. When new reporting processes were introduced, there may have been some over-reporting and over-rating of events. While these events are tragic for those involved, due to the acute nature of community emergencies, changing the processes in the provision of services may not necessarily have improved the outcome for consumers.

Events in 2016–17 included those relating to both direct clinical care and administrative processes, which contribute to clinical outcomes for consumers (including call-taking, dispatch and clinical telephone advice systems).

The adverse events review group will continue to work with the NASO and the Commission, and build upon achievements to date in the coming year.
Learning story: St John uses adverse events reporting to improve quality and safety

Ambulance service call handlers and dispatchers are certified to practise using a system to support call processing and triage called the Medical Priority Dispatch System, which is managed by the International Academies of Emergency Medical Dispatch (IAEMD). This system has many algorithms and codes which enable the appropriate ambulance response to be dispatched, depending on the situation of the person calling for an ambulance. A system upgrade was recently implemented, introducing various changes and additions following analysis by the IAEMD Council of Standards.

There were adverse events reported in St John’s internal reporting system, where it seemed one specific code, which could involve a high mechanism of injury (and therefore risk to patients), was being underutilised. As a result, additional training around the code and related protocol was provided through one-on-one coaching by St John’s clinical control services quality improvement co-ordinators in the control centre.

A call handler received a ‘111’ call from a building site, where a worker was crushed when timber frames for a house fell and the worker had no feeling in their legs. An ambulance was immediately dispatched and, using the new code, the dispatcher anticipated a helicopter may also be required to transport the patient to hospital due to the risk of spinal injury. Upon arrival, the paramedic notified that the patient was experiencing some tingling down the legs with nil feeling in the lower legs. A call to the clinical support officer confirmed the Spinal Cord Injury Destination Policy criteria had been met. A helicopter was dispatched, with a spinal mattress, to the patient. The patient received the most appropriate care for their clinical condition.

The call handler who triaged this call stated that, had she not received the additional training, she would likely not have utilised the appropriate coding.

The investigation of this case showed how patient safety improved due to two factors:

• the enactment of a specific recommendation made during adverse event management
• a proactive approach to learnings gleaned from internal communication publications.

All other reporting

Other providers reported six adverse events to the Commission in 2016–17:

• aged residential care: one event – pressure injury
• PHOs: one event – serious harm from a fall
• hospice: two events – one pressure injury and one serious harm from a fall
• community service: two events – both adverse outcome.
Discussion and next steps

This report provides rich information for the health and disability sector, and the Commission, to continue the improvement and development of the adverse events learning programme, and reporting of events by the health and disability sector.

The update of the Policy in 2017 provided the opportunity to reflect on achievements and challenges since public reporting began. Adverse events reporting by the sector has improved over time, in terms of reporting numbers, and in the breadth of types of events reported by DHBs and, more recently, the wider non-DHB sector. By engaging in reporting using a ‘just culture’ approach, organisations can build a safety culture over time. Organisations with strong safety cultures are more likely to report, review and, most importantly, learn when adverse events occur.

The updated Policy is directed at assisting the development and improvement of systems and responses to adverse events in the health and disability sector. The emphasis on consumer involvement, strengthening open communication, governance requirements and staff support are key to that improvement.

There is, however, still work to be done, because preventable harm continues to occur and opportunities exist to improve consumer and whānau experience. The updated Policy and associated guidance supports this by emphasising the development and improvement of systems, responses to adverse events, consumer involvement, strengthening open communication, governance requirements and staff support. These are key to improving the safety of health and disability services.

To continue the improvement of the safety and experience of care in health and disability services, the Commission recommends the following for 2017–18.

Providers:

- work to implement the Policy changes into existing policies, processes and systems
  - a priority focus should be given to action in partnering with consumers and their whānau in adverse events review and learning processes
- build capability to support good quality adverse events review and consider taking up the opportunity to receive feedback from the Commission on reviews
- consider sharing full, non-identifiable review reports with the Commission to enhance the potential for national learning and improved analysis of adverse events
- work to improve the timeliness of reporting and review of adverse events to meet Policy expectations
- work to ensure governance oversight of serious adverse events review, including recommendations and actions to be completed.

The Commission:

- supports providers to implement the updated Policy, particularly in moving to a more consumer-centred approach, improving systems for reviewing, reporting and learning
- continues to develop resources, guidance and tools to support Policy implementation
- develops and improves capability in adverse events review. This includes continuation of existing adverse events review training, development of a masterclass and consideration of emerging ideas in future programme development, for example, from feedback generated at the Safety II workshop
- continues to support the health and disability sector in reporting and learning from adverse events.
Appendix A: Adverse events data 2016-17

Adverse events reporting process

Following an adverse event, organisations classify and determine the severity of the event through their own internal processes, guided by the Policy.

Notifications are received in two stages. Organisations notify the Commission of an event using the Adverse Event Brief (AEB) Part A. The Part A report contains information regarding the organisation's initial understanding of the event. Following an event analysis, organisations provide the Commission with an AEB Part B, which contains a summary of findings and recommendations. Consumer privacy is protected at all times in accordance with the Health Information Privacy Code.

How do we classify and report events?

All adverse events reported to the Commission are classified by the providing organisation into one of 14 broad event categories. These categories are based on the World Health Organization International Classification for Patient Safety incident type, with the adaptation of falls being added as a standalone category.

The complexity of health care means that, for any adverse event, there may be more than one underlying cause. As a result, the principle category selected can be subjective and may not reflect all contributing causes. Following event analysis, both the severity score and the event code may change. At this point, some events are withdrawn as they are re-rated as SAC 3 or 4. During the last year, 74 events reported by all providers in AEB Part A reports as SAC 1 or 2 were withdrawn.

98 AEB Part B reports are received throughout the year as organisations finalise reviews. The Commission’s adverse events database is reconciled following the closure date for reporting each year. As Part B reports may be received subsequent to reconciliation, they may not have been included in this report analysis.

99 www.who.int/patientsafety/taxonomy/icps_full_report.pdf
Total DHB events over time

The total number of events reported in 2016–17 has increased compared with 2015–16 (Figure 5).

Figure 5: Reported DHB adverse events (non-mental health), 2006–07 to 2016–17

Following the theme that emerged last year, this relates to a second consecutive increase in clinical management events and a decrease in falls adverse events.

Figure 6: DHB adverse events, by event type, 2016–17

The total number of events reported in 2016–17 has increased compared with 2015–16 (Figure 5).

Note: As mental health adverse event numbers are not included in this figure, numbers prior to 2013 will differ from those previously published in adverse events reports.