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# Sentinel Events

Annual Report 2022–2023

## **Acknowledgement of Country**

Our office is based on the land of the Traditional Owners, the Wurundjeri people of the Kulin Nation. We acknowledge and pay respect to their history, culture, and their Elders past, present and emerging.

We acknowledge Aboriginal people as Australia's first peoples and as the Traditional Owners and custodians of the land and water on which we rely.

We recognise and value the ongoing contribution of Aboriginal people and communities to Victorian life and how this enriches us.

We embrace the spirit of reconciliation, working towards the equality of outcomes and ensuring an equal voice.

For this land always was, and always will be, Aboriginal Land.

## **Acknowledgement of lived experience**

Safer Care Victoria acknowledges the consumers, families, carers, friends and loved ones who have experienced, or have been affected by, sentinel events. We are deeply sorry for their distress and grief. We bear witness to their stories in the sincere hope of improving care for others.

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# CEO foreword

**Safer Care Victoria (SCV) exists to support a safer healthcare system for all Victorians. While most healthcare in Victoria leads to good outcomes, there are times when things go wrong and patients are harmed as a result. These events have a devastating impact on patients, their families and carers, and the healthcare staff involved. As a healthcare system, we need to be honest when harm occurs and we have a shared responsibility to learn from these events.**

This year's Sentinel Event Annual Report contains detailed information about harm events, analysis of key themes, and advice and recommendations for health services. It also includes links to a range of resources and examples of improvement activities underway across the sector.

Between July 2022 and June 2023, 245 sentinel events were reported to us. This is an increase of two per cent from the year before and is consistent with the year-on-year growth in notifications seen since SCV took ownership of the program. We believe this trend demonstrates an improving safety culture of transparency and an increasing desire to learn.

This report describes:

- improved consumer representation on event review panels
- improved engagement of patients, their families and carers in review processes
- improved open disclosure and sharing of reports with patients, their families and carers at the end of the review process.

These improvements demonstrate that services are keeping consumers at the centre of the work that they do.

All health service staff, including clinicians, administrative and support staff, have a vital role to play in providing safe care, as do we in government. Over the next year, we look forward to supporting health services and consumers as we continue our work to learn from serious patient harm and strive for outstanding healthcare for all Victorians. Always.



**Louise McKinlay**  
CEO, Safer Care Victoria



# Introduction

**This report provides an overview of the trends that we have identified through the sentinel event notification process across the 2022–2023 financial year. The purpose of this report is to drive improvement in the safety of Victorian healthcare. We want health services to understand the factors that are leading to patient harm and provide them with the tools and solutions to reduce the risk of recurrence.**

This year's report contains sections relating to three specific sentinel event themes:





- paediatric sentinel events
- medication safety-related events
- perioperative events.

This report also covers topics related to the review of sentinel events:

- engaging with patients, families, and carers
- Statutory Duty of Candour
- recommendations from event reviews.

This report contains a high-level summary of key insights from real events, including lessons learnt, and service level and system-wide improvements that are being actioned, which health services may be able to learn from.

We want this report to be accessible and relevant to consumers and health services. To make this easier, some of the key things contained in the report include:

-  actions that health services may wish to take in response to the information provided
-  actions that consumers may wish to take
-  links to further resources and a resources list at the end of the report, to help drive awareness of our Sentinel Events Program
-  areas of significant health service improvement
- a glossary at the end of the report.

Throughout this report, names and clinical details have been changed to protect patient privacy. The data presented is primarily descriptive. Data has been rounded to the nearest percentage and where multiple categories are displayed in infographics data may be cut of at 80% of responses to make it clearer.

## FEEDBACK AND FUTURE REPORTS

### How did we do?

When you have finished reading this report, we would value your feedback. Please complete our quick online survey <<https://tinyurl.com/SCVreports>> or use the **QR code** below to access it.



### Do you have a consumer or health service story to share?

If you would like to be involved in the development of future reports and share your story, please provide your contact details at the end of the survey or email SCV <[sentinel.events@safercare.vic.gov.au](mailto:sentinel.events@safercare.vic.gov.au)>.

## WHAT IS A SENTINEL EVENT?

**Sentinel events are unexpected and adverse events that occur infrequently in a health service entity and result in the death of, or serious physical or psychological harm to, a patient because of system and process deficiencies.**

Serious harm is considered to have occurred when the patient has:

- required life-saving surgical or medical intervention
- shortened life expectancy
- experienced permanent or long-term physical harm
- experienced permanent or long-term loss of function.

Life-saving surgical and medical treatments can include, but are not limited to, advanced life support measures, such as intubation or emergency surgery.

## WHICH EVENTS ARE NOTIFIABLE IN VICTORIA?

Victorian health services must notify and review sentinel events that meet the criteria for both the Australian sentinel event categories (1–10) set out by the Australian Commission on Safety and Quality in Healthcare (the Commission), and those that fall under the Victorian-only Category 11: All other adverse patient safety events resulting in serious harm or death.

The Commission defines sentinel events as a subset of adverse patient safety events that are preventable and result in serious harm to, or death of, a patient. For details on national categories, visit [Incident management and sentinel events](https://www.safetyandquality.gov.au/our-work/indicators-measurement-and-reporting/incident-management-and-sentinel-events) <<https://www.safetyandquality.gov.au/our-work/indicators-measurement-and-reporting/incident-management-and-sentinel-events>>.

Category 11 was established in Victoria to capture all other adverse events that result in serious harm. This brings us into alignment with other

states that report events of this nature through different mechanisms. This inclusion ensures we have greater visibility of risks that lie within our system and provides a learning opportunity as a state. Category 11 does not require that the event be 'wholly preventable' for it to be notified.



### NEW RESOURCE:

#### Updated sentinel events guide

An updated version of the [Victorian sentinel events guide](https://www.safercare.vic.gov.au/best-practice-improvement/publications/sentinel-events-guide) <<https://www.safercare.vic.gov.au/best-practice-improvement/publications/sentinel-events-guide>> was released in February 2024. This guide was revised to help health services in Victoria fulfil their obligations when notifying and managing sentinel events.

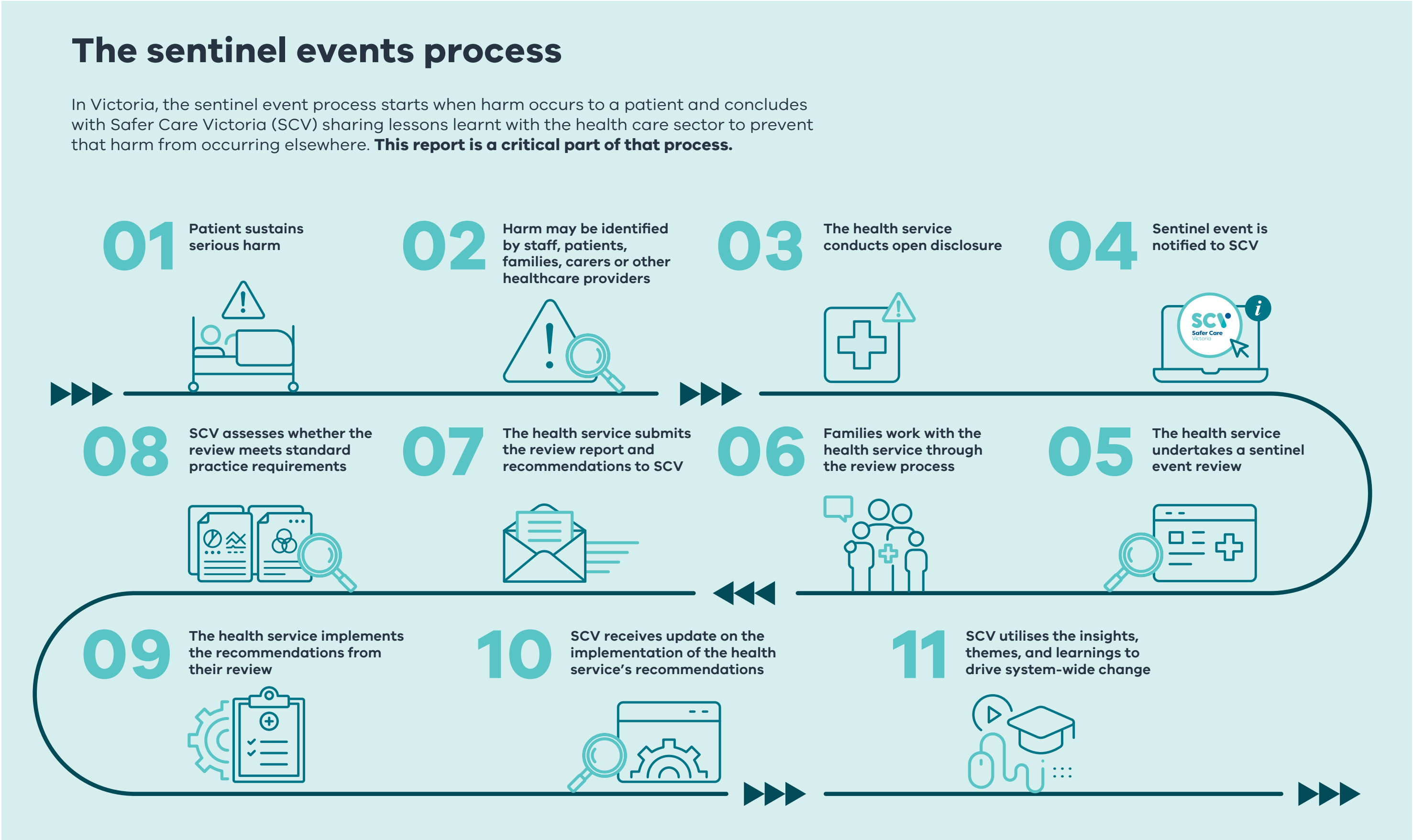
This resource contains:

- updated guidance for notifiable sentinel events, including psychological harm, falls, self-harm and healthcare-associated infection events
- guidance on the Victoria-only sentinel event Category 11 and the Statutory Duty of Candour, including case studies.

## THE SENTINEL EVENTS PROCESS

Figure 1 outlines the sentinel events process. For more information, visit [Notify and review a sentinel event](https://www.safercare.vic.gov.au/report-manage-issues/sentinel-events/notify-and-review-a-sentinel-event#goto-download) <<https://www.safercare.vic.gov.au/report-manage-issues/sentinel-events/notify-and-review-a-sentinel-event#goto-download>>.

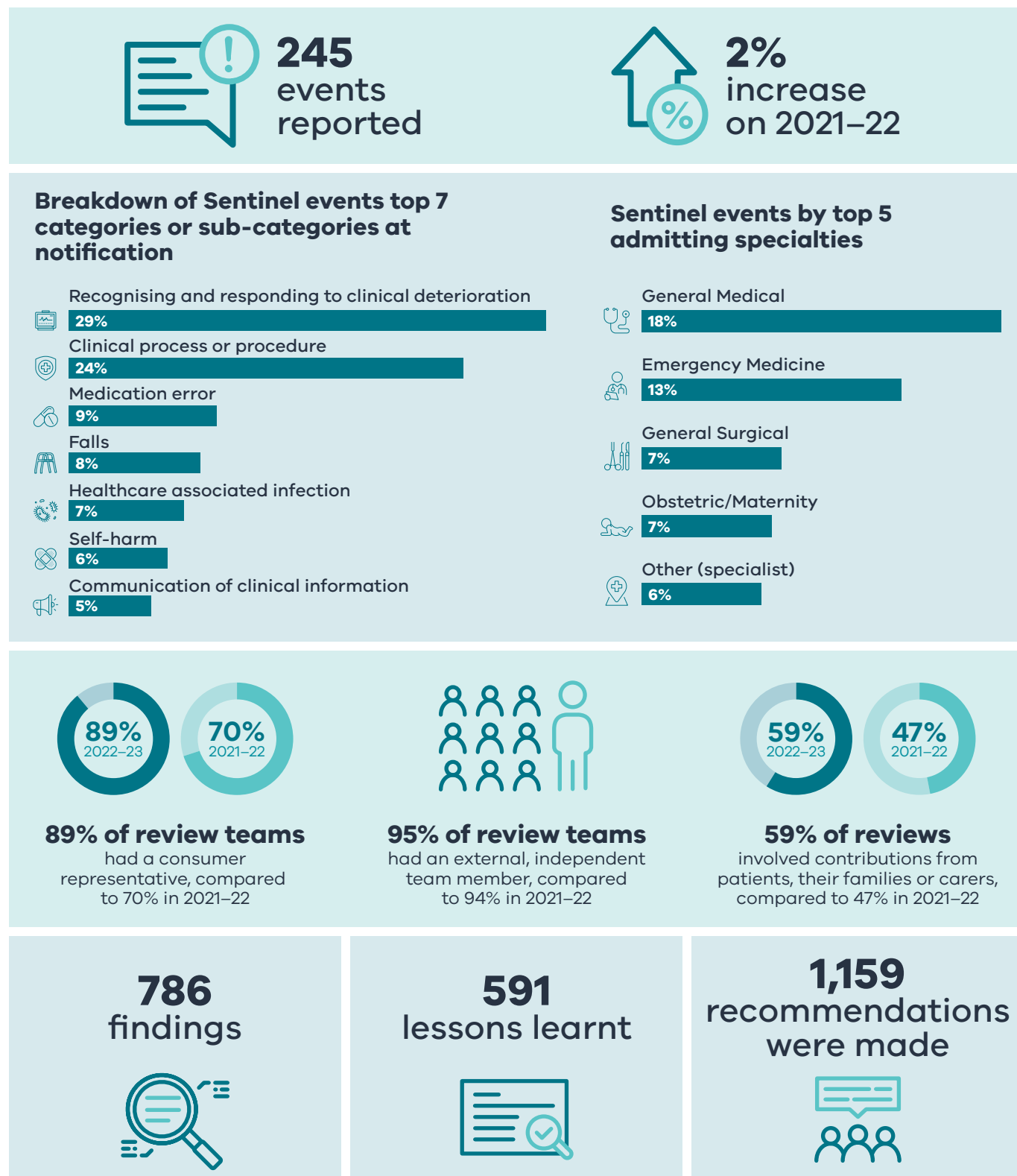
Figure 1. The sentinel events process in Victoria





# 2022–2023 at a glance

Figure 2. An overview of 2022–2023 sentinel events

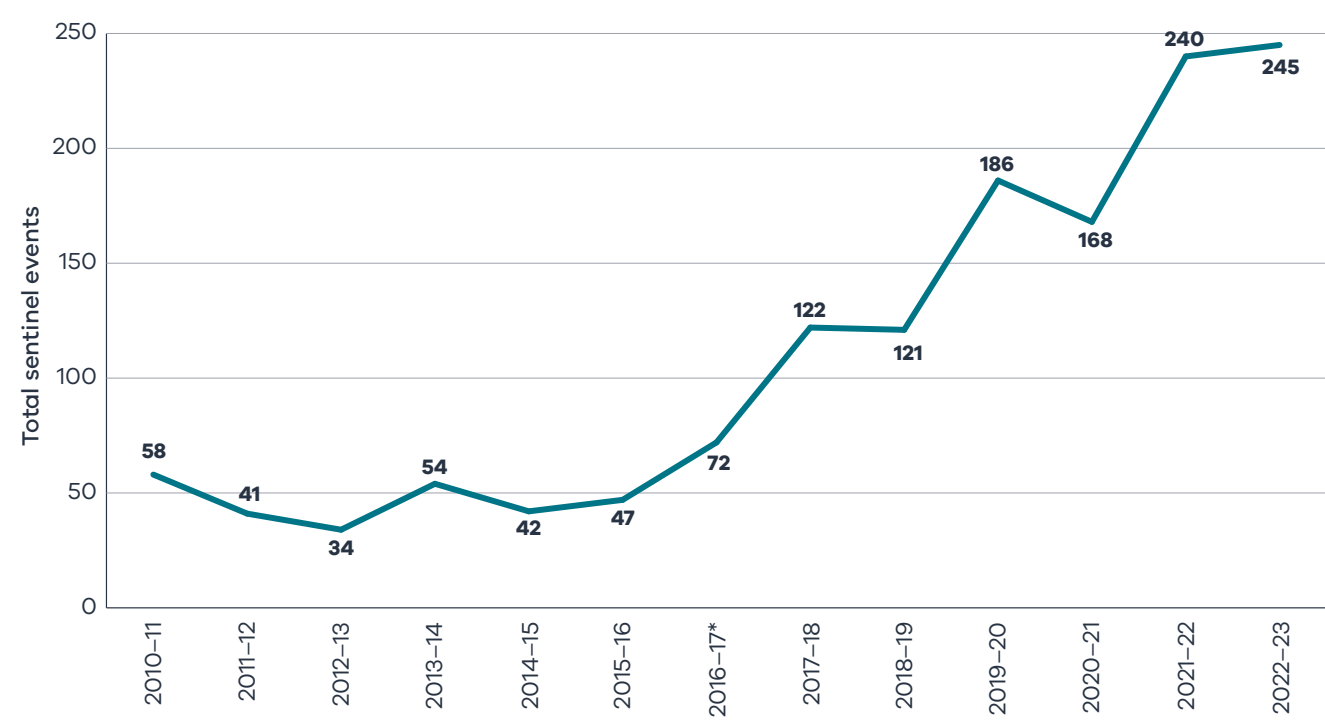


# Sentinel events reporting

In 2022–23, sentinel event notifications to SCV increased two per cent from the previous year. This increase is consistent with the upward trend over the past decade, as shown in Figure 3. Increased recognition, notification and review of sentinel events show ongoing and increasing transparency from the health sector.

Most notifications continue to be made under the Victorian-only Category 11. Category 11 events made up 86 per cent of notifications in 2022–23 and 88 per cent of notifications in 2021–22.

Figure 3. Sentinel event notifications 1 July 2010 to 30 June 2023

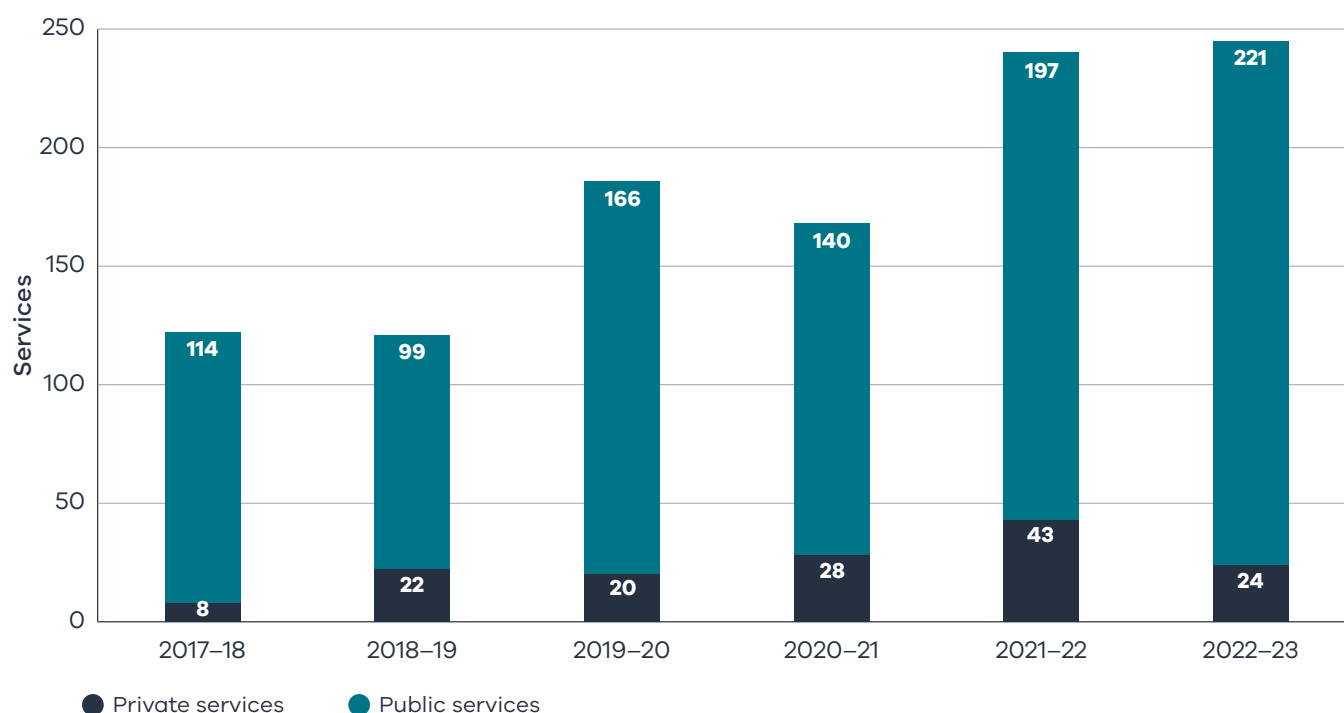


\*On 1 July 2017, SCV took ownership of the Sentinel Event Program from the Department of Health.

## SERVICES NOTIFYING EVENTS

While we saw an increase in events notified, as shown in Figure 4, there was a reduction in the number of health services notifying events in 2022–23. This was most notable for private hospitals, with a reduction in both events notified and the number of services notifying a sentinel event.

**Figure 4. Number of sentinel events notified by public and private health services 1 July 2017 to 30 June 2023**



Note: sentinel events reporting became mandatory for private hospitals in 2018-2019

The Private Hospitals Unit in the Department of Health ensures that private services are aware of their sentinel events reporting requirements,

and prompt onboarding to the sentinel events reporting portal, as part of their regular regulatory visits.

**Table 1. Health services notifying sentinel events 2021-22 and 2022-23**

Health services notifications	2021-22	2022-23
<b>Number of sentinel events</b>	240	245
<b>Number of health services notifying events</b>	64	54
<b>Number of public services notifying sentinel events</b> (total public services = 77)	44	39
<b>Number of private hospitals notifying sentinel events</b> (total private health services = 78)	20	15
<b>Number of day procedure centres notifying events</b> (total day procedure centres = 96)	0	0

Throughout 2024, SCV will be doing targeted work with services that are not engaged with the Sentinel Events Program. This includes services yet to notify a sentinel event and those that have not reported an event for an extended period of time (based on the size of the health service).

### ADVICE FOR HEALTH SERVICES

If you are working in quality and safety at a health service, you can learn more about your reporting requirements by visiting Notify and review a sentinel event <<https://www.safercare.vic.gov.au/report-manage-issues/sentinel-events>>. If you need assistance to ensure you are onboarded to the sentinel events reporting portal or would like more information, please email the Sentinel Events Program <[sentinel.events@safercare.vic.gov.au](mailto:sentinel.events@safercare.vic.gov.au)>.

### ADVICE FOR CONSUMERS

If you are interested in working with your health service to improve quality and safety, there are ways to get involved. You could become a consumer representative and join the panels that review adverse events, or join a committee focused on improving safety or patient care. Contact your local health service or for more information, visit:

- Guides to consumer representatives on adverse event reviews <<https://www.safercare.vic.gov.au/best-practice-improvement/publications/guides-to-consumer-representatives-on-adverse-event-reviews>>
- Partnering with Consumers: A guide for consumers <<https://www.safetyandquality.gov.au/publications-and-resources/resource-library/partnering-consumers-guide-consumers>>.

## UNDERSTANDING REPORTING CULTURE

We know that health services with a good safety culture have better patient outcomes. A good reporting culture is a key element of a robust safety culture. It is seen when staff are valued, enabled and encouraged to report all adverse patient safety events to support learning for improvement.

In 2023, SCV completed a study to understand adverse event reporting and the reporting culture in Victoria.

There were 35 health services approached to participate, with 25 services taking part, including public and private services. There were 1,549 healthcare workers who participated in a survey, providing information on barriers and enablers to sentinel events and other adverse event reporting. They provided personal experience of sentinel event notifications and the corresponding review processes.

Respondents represented 132 distinct roles and 16 different departments. There were 23 per cent of respondents in management roles.

During data analysis, responses for those in non-management and management roles (including quality and safety roles) were compared. Analysis of results showed variance in the responses and perceptions of the management group, when compared to other respondents.

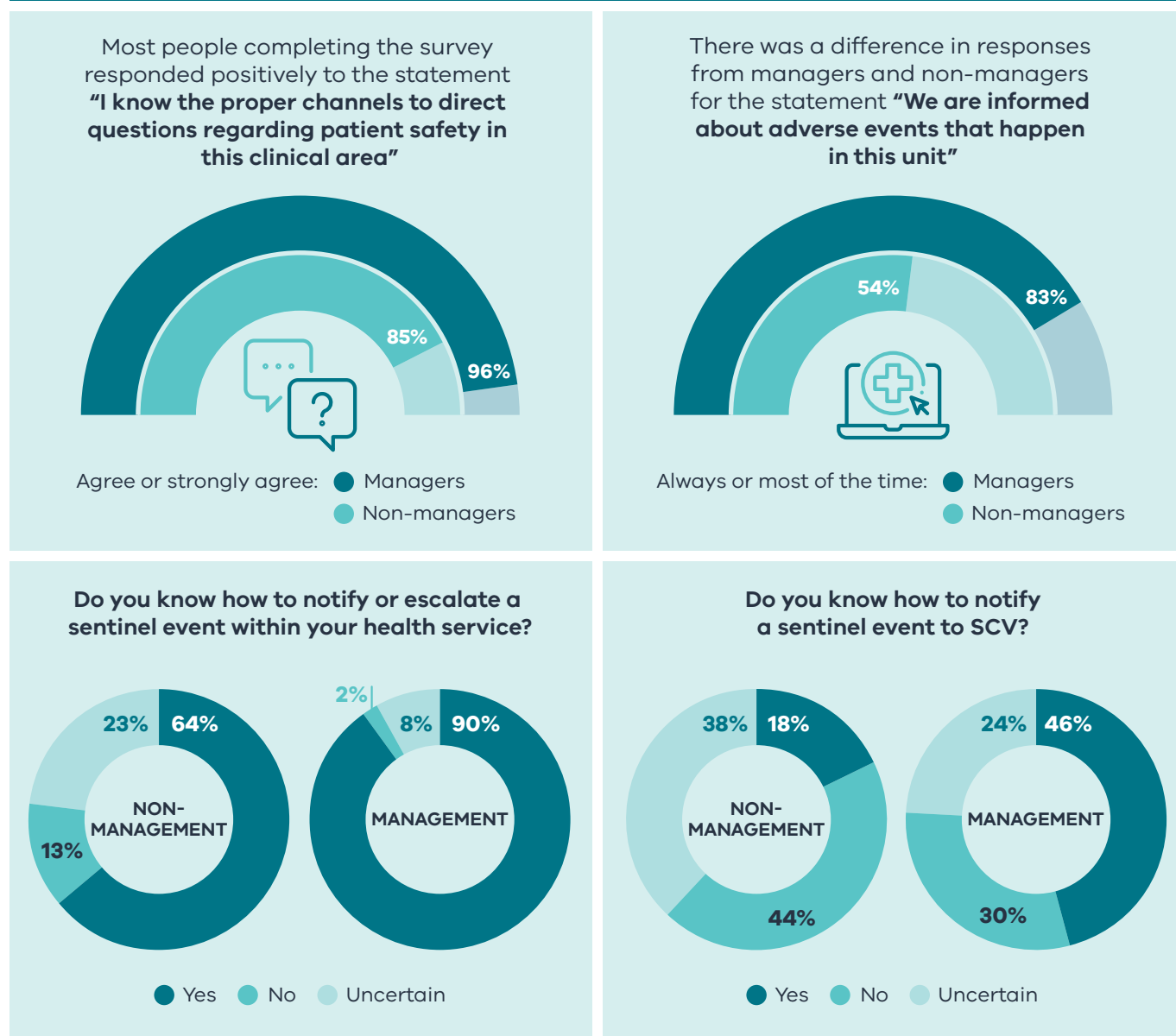
Key findings included that:

- most respondents were aware of the appropriate channels to direct questions regarding patient safety in their unit
- there was variance in respondents feeling that they were informed about adverse events that happen in their unit.

This study found two key opportunities to improve:

- communication and feedback between staff, unit managers, quality staff and executive
- awareness and understanding about all types of adverse event reporting at all levels of health organisations.

**Figure 5. Survey results for questions relating to sentinel event notifications**





## ADVICE FOR HEALTH SERVICES

Non-management staff indicated they were not always aware of harm events, reporting and outcomes. Understanding previous harm events is pivotal in supporting change, improvements and safety culture in the effort to reduce future harm. Sharing the lessons learnt from previous adverse events and near misses by unit managers and quality and safety staff would improve quality and safety outcomes.

To access the range of tools that SCV provides to support health services to improve staff awareness and understanding of adverse event reporting, visit Managing adverse events <<https://www.safercare.vic.gov.au/report-manage-issues/managing-adverse-events>>.

Health services can also improve their leadership of safety by taking part in one of the Board and Executive clinical governance leadership programs offered by SCV.

For more information, please email SCV <[culture.capability@safercare.vic.gov.au](mailto:culture.capability@safercare.vic.gov.au)>.

## NEW RESOURCE:

### **Victorian Safety Culture Guide**

SCV has developed an inaugural Victorian Safety Culture Guide. This guide is designed to support healthcare boards, CEOs, and executives in measuring and monitoring their organisation's safety culture.

It offers actionable strategies, practical approaches, and best practices for improving safety culture across all Victorian healthcare services, utilising existing methods widely available.

If you would like an advanced copy of the guide please contact SCV <[culture.capability@safercare.vic.gov.au](mailto:culture.capability@safercare.vic.gov.au)>

The guide will be available from September via the SCV website.

# Key sentinel event themes 2022–2023

To maximise learning and improvement opportunities, we are focusing on key sentinel event themes that are frequently reported or provide a key learning for the state.

This year's report contains sections relating to three specific sentinel event themes, being:

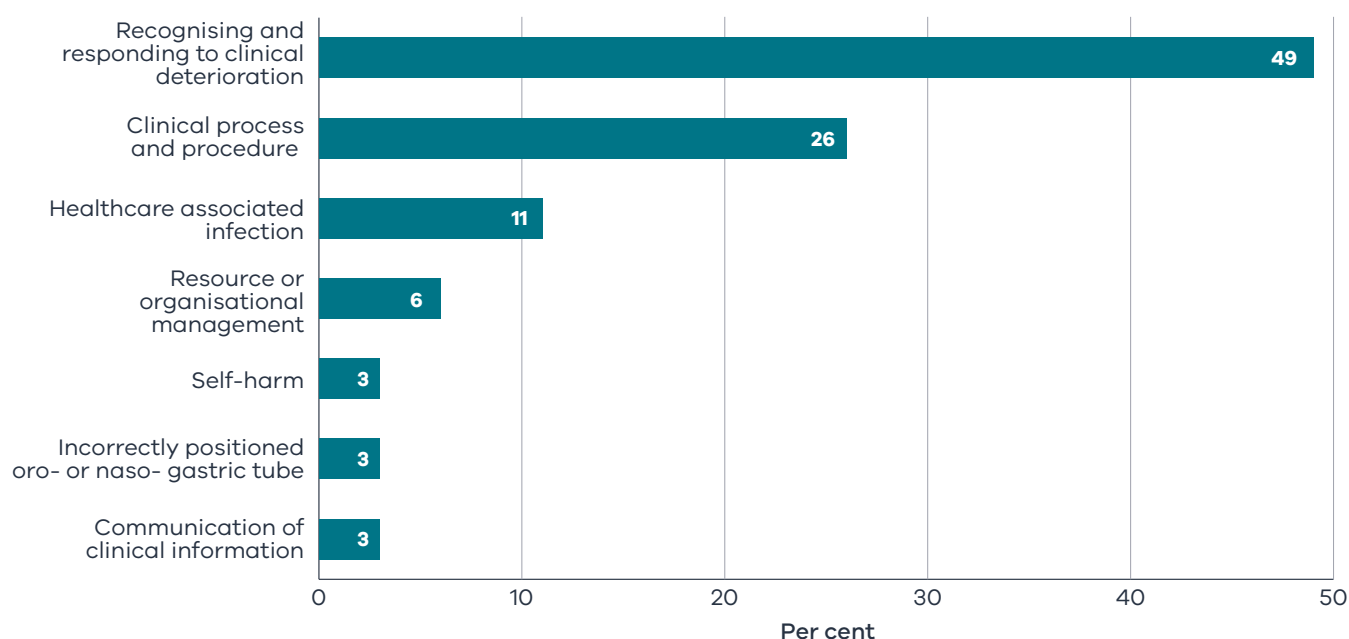
- paediatric sentinel events – demonstrating progress to address this key theme, which was included in the 2021–22 annual report
- medication safety events – revisiting this area of focus from the 2019–20 annual report and highlighting some new initiatives
- perioperative events – a new area of focus for this report.

## PAEDIATRIC SENTINEL EVENTS

In 2022–23, 14 per cent of sentinel events (35) impacted paediatric patients, compared to 16 per cent of sentinel events (38) occurring in 2021–22. SCV notes that this difference is not statistically significant and the proportion of paediatric sentinel events is comparative to the volume of healthcare provided to paediatric patients. In 2022–23, admitted paediatric patient episodes of care (known as separations) and emergency department presentations to Victorian hospitals for public and private services made up 14.7 per cent of total separations and presentations.

In 2022–23, the most common theme for paediatric sentinel events continued to be the recognition and response to clinical deterioration (49 per cent of events), as indicated in Figure 6.

**Figure 6. Paediatric sentinel events by category and subcategory 2022–23**



Note: Total >100 per cent due to rounding

**The following examples of service and system-level improvements focus on improving the identification and response to clinical deterioration.**

## **IMPROVING SYSTEM SAFETY: SAFER CARE FOR KIDS**

In November 2022, SCV held a roundtable event focused on improving the care of acutely unwell children and young people. Over 100 clinicians, managers, family members and carers shared their experiences, which supported the development of three recommendations to improve the safety of care.

These were:

1. Deliver a statewide family and carer escalation of patient deterioration process.
2. Implement a 24/7 system of virtual paediatric emergency consultation.
3. Mandate the use of the Victorian Children's Tool for Observation and Response (ViCTOR) chart, wherever children and young people have vital signs recorded.

In 2023, the Safer Care for Kids project was established to codesign and implement these recommendations, in close partnership with affected families, the health sector and the Department of Health. The following provides an update on the progress of each of these recommendations.

### **Deliver a statewide family and carer escalation of patient deterioration process**

In February 2024, SCV completed the scoping phase of this project, engaging over 30 clinicians and 15 lived-experience experts to identify the essential elements of the family and carer escalation process.

As a result, a family and carer escalation phone line will commence as a targeted pilot across four Victorian health services, led by the Victorian

Virtual Emergency Department (VVED) via Northern Health, with an aim to launch statewide in March 2025. This escalation process will not replace local health service escalation processes, but will instead provide an extra point of contact for advocacy and support when local responses have been exhausted.

### **Implement a 24/7 system of virtual paediatric emergency consultation**

There are two services that already provide 24/7 virtual care: the Paediatric Infant Perinatal Emergency Retrieval (PIPER) service and the VVED. PIPER is available to provide 24/7 expert, urgent paediatric consultation and retrieval to acutely unwell children in hospitals, emergency departments and urgent care centres.

The VVED provides 24/7 virtual access to healthcare for non-life-threatening conditions. Any person in Victoria can access the VVED for specialised paediatric clinical support. This includes healthcare providers, families and carers seeking assistance. To access and learn more, visit [the VVED <https://www.vved.org.au>](https://www.vved.org.au).

Strengthening awareness of these 24/7 paediatric consultation options within the healthcare sector and the public is a priority in 2024.

### **Mandate the use of the ViCTOR chart, wherever children and young people have vital signs recorded**

Most Victorian health services use ViCTOR charts when recording vital signs. Services yet to implement use of the charts were expected to have shown progress against this by 30 June 2024. SCV has refined the ViCTOR charts to emphasise assessment of parental and carer concern when recording vital sign observations.

## IMPROVING SYSTEM SAFETY: oneTEAM, A ROYAL CHILDREN'S HOSPITAL (RCH) INITIATIVE

In response to harm across the sector from failure to escalate care, the RCH in Melbourne codesigned a new initiative called **oneTEAM** <<https://www.rch.org.au/oneteam/>>. oneTEAM invites the parents and carers of the patient to be part of their clinical team and aims to improve the early recognition of clinical deterioration. oneTEAM recognises that parents and carers are experts where their child is concerned, and notice changes that may be missed by clinicians. It provides a simple consumer pathway for escalation, one that consumers feel confident to use and clinicians know how to respond to.

oneTEAM has two components. Parents or carers are invited to share their concerns during nursing observations and medical ward rounds by asking them 'Do you have any concerns about your child at the moment?'. Parents and carers have multiple opportunities each day to inform staff of any concerns by answering this question.

The second component is an escalation pathway aligned to RCH's clinical escalation process, which now allows parents to escalate their concerns by asking for a rapid review. This can be done by using the orange Rapid Review card to ask for a rapid review. The card is an innovative consumer-led design, which, along with posters and translated resources, as shown in Figure 7, are displayed in every inpatient room. Parents and carers are informed about the process on admission.

Piloted in 2023, oneTEAM has now been rolled out to eight inpatient wards at RCH. The project is supported by the collection of accurate and timely data through the electronic medical record. This information is then shared with teams to drive improvement.

Results have shown that parents and carers are confident to use the process and are relieved to have a way to ensure their voices are heard. Junior nursing staff reported that proactively asking parents about concerns helped support their own clinical decision-making.

Next steps involve better understanding potential cultural barriers impacting how the initiative is received by culturally diverse communities and developing strategies to lower access barriers.

*Prepared by Dr Annie Moulden, Paediatrician and Emily McGuigan, Improvement Manager*

**Figure 7. oneTEAM's consumer escalation poster**

**oneTEAM**  
**PARENTS/CARERS,**  
**speak up and feel heard**

We believe you know your child best. If at any time, you feel like your child is getting sicker or you're worried about their condition, we want you to speak up.

**Step 1** **Talk to your nurse**  
If you are still worried go to **STEP 2**.

**Step 2** **Escalate to the nurse in charge**  
Ask to speak with the nurse in charge of the shift.  
If you are still worried go to **STEP 3**.

**Step 3** **Ask for a rapid medical review**  
Give this card to a nurse.  
A doctor will see your child within 30 minutes.  
If you are still worried go to **STEP 4**.

**Step 4** **Medical Emergency Team (MET)**  
A parent or carer can call a MET at any time:  
• Dial **2222** from a hospital phone  
• Dial **9345 5222** from a mobile phone  
Ask the operator to call a MET, provide your child's room number, and ward name.  
A team of nursing and medical staff will respond immediately.

**No orange card?**  
Scan QR code link to digital version of orange card

The Royal Children's Hospital (RCH) acknowledges the traditional owners of the land on which the RCH is situated the Wurundjeri people of the Kulin Nation, and we pay our respects to their Elders past and present.

## Consumer stories:



After using oneTEAM: In that moment, I could just focus on being Macy's mum, comforting her through her distress. I didn't have to worry about how to best advocate for her: how to make myself feel heard. The nurses took charge of that and I was confident that my concerns were taken seriously. It was seamless. Kate, Macy's mum.

After seeing oneTEAM promoted: My name is Phoebe and I am the parent of a child that deteriorated in the emergency department a few years ago. Thankfully, she was ok (eventually) and now that horrible experience is just a memory. I was recently in the hospital again when my daughter was admitted, and I saw the new 'oneTEAM speak up and feel heard' poster in the room along with the corresponding language translations poster.

I wanted to say a huge thank you for implementing this and how wonderful it was to see. It honestly brought tears to my eyes as soon as I saw it, knowing how much that will help someone one day. Thanks so much for all your efforts in all the steps I imagine it

took to get those posters on the wall, to all the committees and quality and safety staff, all the people behind the scenes and to all the doctors and nurses who will follow those new steps to hear parents' concerns via that method.

Knowing that the parent-led internal Medical Emergency Team (MET) call is an option is fantastic should it come to that. The card especially is a really practical, achievable solution to helping parents feel empowered to speak up.

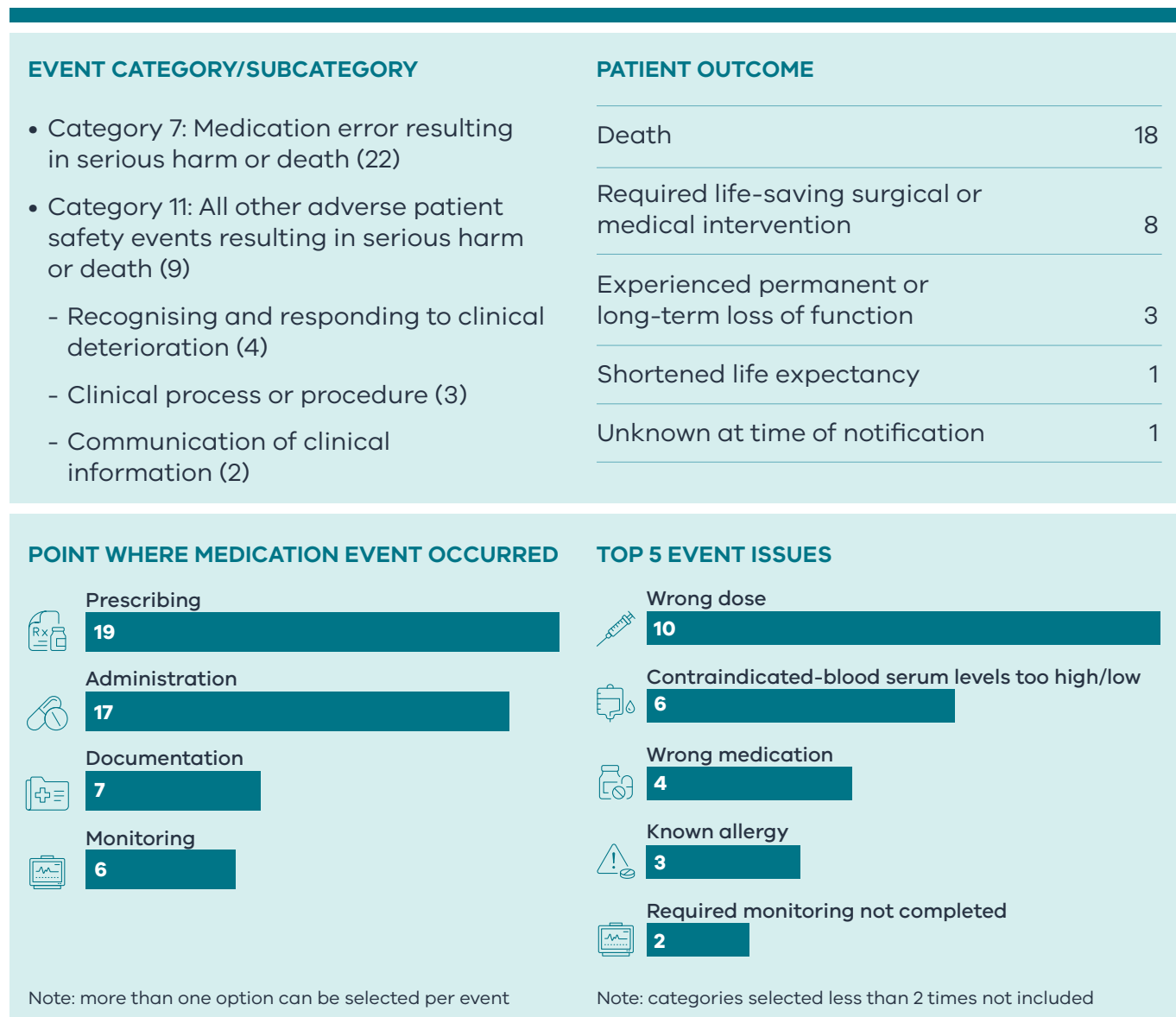
I just wanted to say a heartfelt thank you for putting those cards and the clear information on the walls.

## ADVICE FOR CONSUMERS

All health service organisations are required to have a process for patients, carers or families to directly escalate any care concerns. Patients, carers and families should receive written and verbal information about the system for escalation on admission, and have details about when and how to use the system displayed in public areas. If you don't see or receive this information, please ask for it.

## MEDICATION SAFETY SENTINEL EVENTS

Figure 8. Event categories/subcategories, patient outcomes and event type

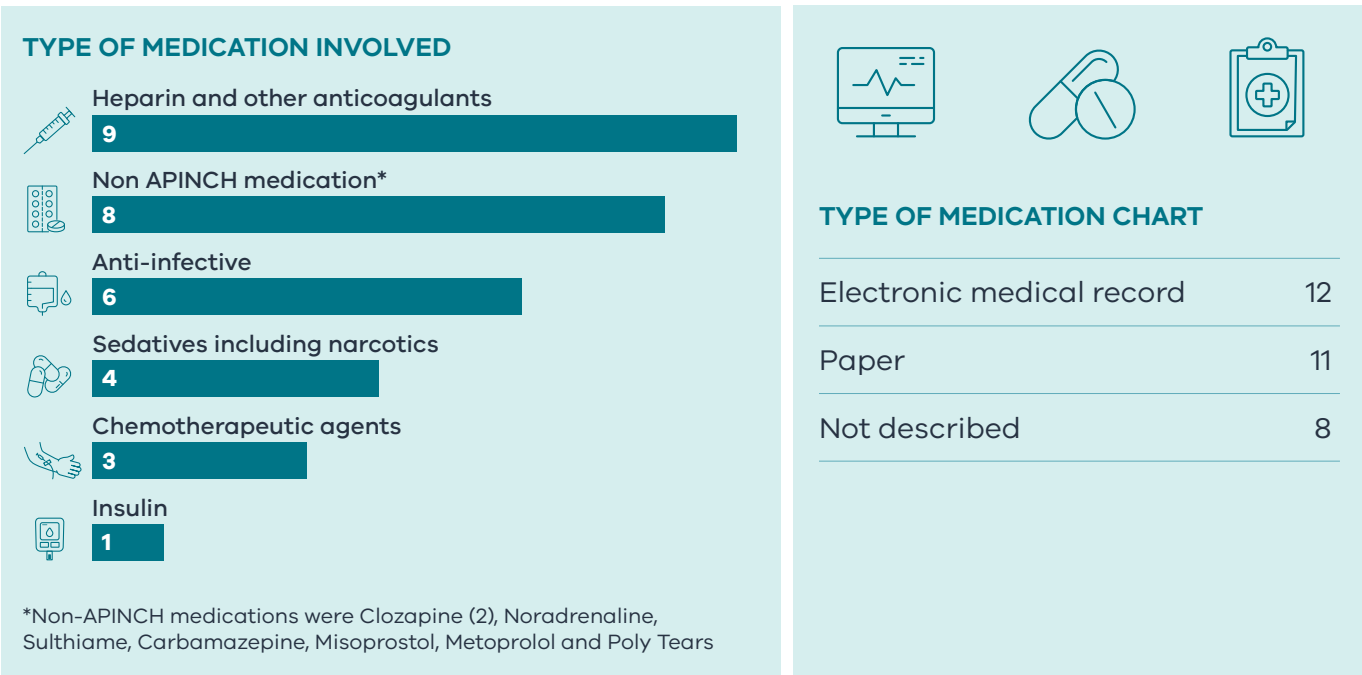




In 2022–23, medication safety sentinel events were the third most-common category of sentinel event, with 31 events reported (13 per cent). Medication safety adverse events were also the

third most-common type of event recorded in the Victorian Health Incident Management System, with most events reported as near misses or causing no harm.

Figure 9. Analysis of medication safety sentinel events

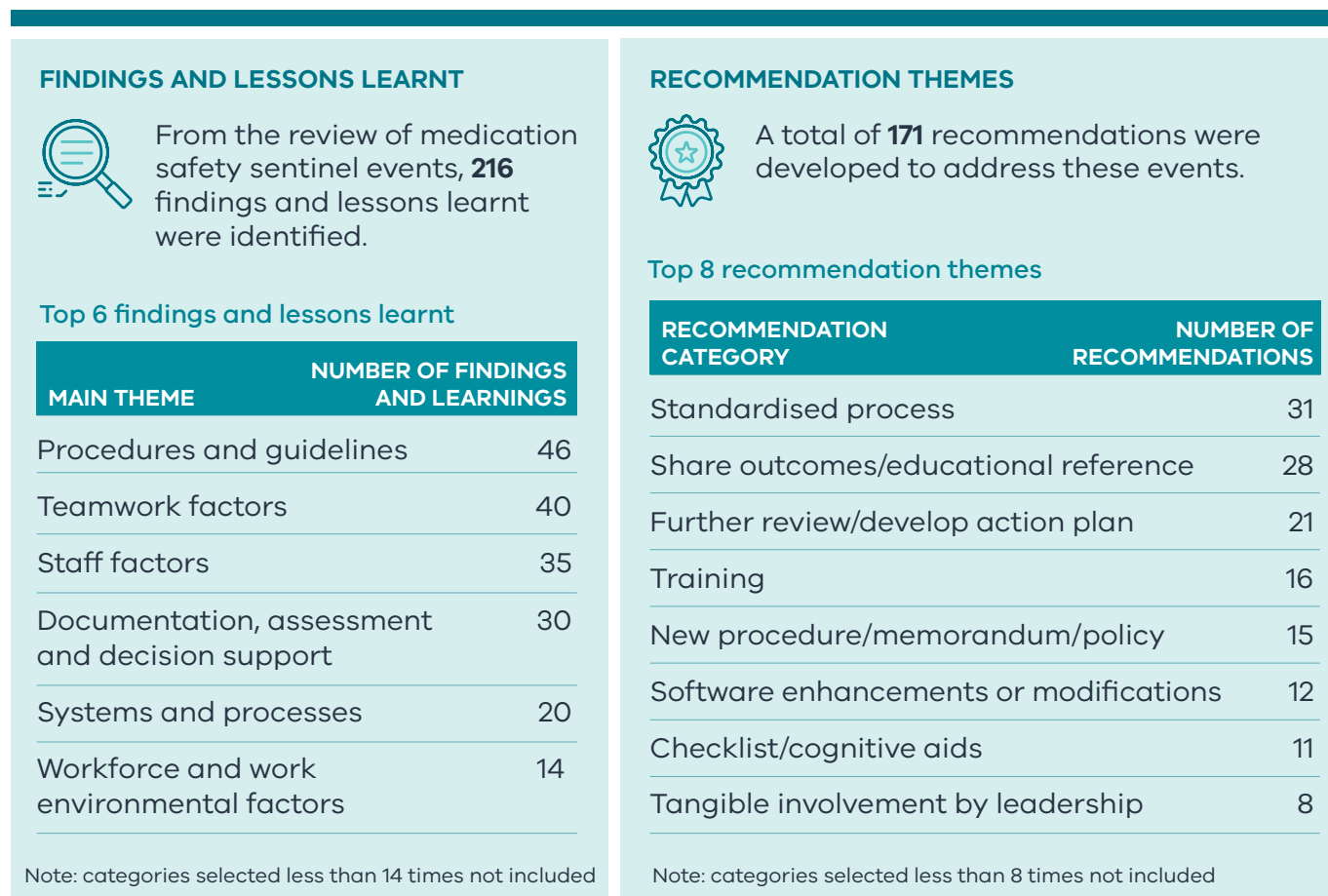


The medication types involved in sentinel events have been classified according to the ‘APINCHS’ acronym, which outlines a group of medications acknowledged to have high potential for patient harm. Anticoagulants were the leading medication class associated with sentinel events.

For more information, visit [APINCHS classification of high risk medicines](https://tinyurl.com/37khkwn6) <<https://tinyurl.com/37khkwn6>>.

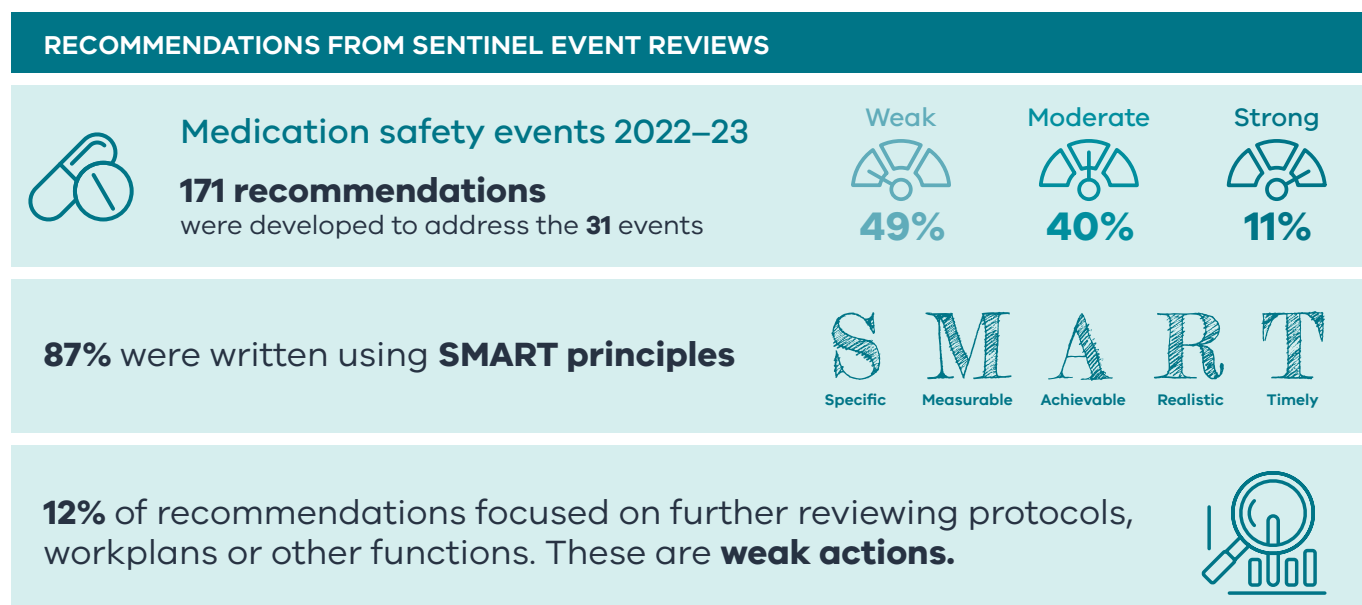
As shown in Figure 10, the review of medication safety sentinel events identified **216** findings and lessons learnt that could be themed under 12 distinct categories.

**Figure 10. Findings, lessons learnt and recommendation themes**



A total of **171** recommendations were developed to address these events, under 18 different themes. Recommendations are classified according to the level of tangible impact that the actions outlined in the recommendation will have within the health service. For more information, see [Recommendations from sentinel event reviews](#) in this document.

**Figure 11. Medication safety recommendations**



### Comparison to previous analysis

Analysis of medication safety sentinel events was included in the 2019–20 Sentinel Events Annual Report.

Key comparisons included that:

- anticoagulants were the most commonly involved medications in sentinel events across both 2019–20 and 2022–23
- in 2019–20, human error was found to be the most common contributing factor to medication safety sentinel events, occurring in 18 per cent of events. This is compared to two per cent in 2022–23, providing evidence that the analysis of sentinel events is moving on from human behaviour to a just culture approach and understanding how the system influences the actions of those involved ☆☆☆
- the recommendations from the review of these events have shown increasing recommendation strength. There were 51 per cent of recommendations rated as moderate or strong in 2022–23, increased from 13 per cent in 2019–20. ☆☆☆

The following medication-related system improvement examples, resources and case study focus on the most common medication category in sentinel events – anticoagulants – and clozapine use, the most common non-APINCHS medication.



## NEW RESOURCE:

### Venous Thromboembolism Guideline

In October 2023, SCV released the [Victorian Guideline for the Prevention of Venous Thromboembolism in Adult Hospitalised Patients](https://www.safercare.vic.gov.au/venous-thromboembolism/victorian-guideline-for-the-prevention-of-venous-thromboembolism-in-adult-hospitalised-patients) <<https://www.safercare.vic.gov.au/venous-thromboembolism/victorian-guideline-for-the-prevention-of-venous-thromboembolism-in-adult-hospitalised-patients>>. This guideline provides information for use by all Victorian healthcare clinicians and health services. It is intended to guide the provision of venous thromboembolism prophylaxis aligned to the Commission's clinical care standard for adult patients admitted to hospital.

## IMPROVING SYSTEM SAFETY: SAFER TOGETHER

SCV's statewide Safer Together program aims to improve safety in Victoria's healthcare system through strengthening networks to proactively address systemic issues and create an environment for collaboration, sharing and learning.

One of the priority areas within the program is reducing medication-related harm. This includes a focus on the management of anticoagulation medication in adults. For further information on the program, visit please [contact SCV](mailto:contact@safercare.vic) <[centreofclinicalexcellence@safercare.vic](mailto:centreofclinicalexcellence@safercare.vic)>

## IMPROVING SYSTEM SAFETY: ANTICOAGULATION STEWARDSHIP SERVICE AT MONASH HEALTH

Monash Health recognised the need for an Anticoagulation Stewardship Service following adverse patient safety event reviews, including

sentinel events. This innovative service aims to promote and optimise the safe use of anticoagulants, improve patient outcomes by reducing adverse events and prevent hospital complications.

The Anticoagulation Stewardship Service is a multidisciplinary partnership between the haematology and pharmacy departments to provide oversight of all adult inpatients, Hospital in the Home and perioperative patients.

Design of the service involved adaptation of national and international stewardship models, combined with local expertise, patient perspectives and technology. It aimed to specifically address the unique needs and challenges to providing care across six campuses and four emergency departments.

With implementation of the service, patient safety is improved through three mechanisms of:

- proactive identification and review of patients at risk of harm through a novel electronic dashboard
- a clinical referral service
- oversight of anticoagulant clinical guidelines.

The service receives referrals from clinical teams. The program's dashboard allows screening of patients with real-time data extraction from the electronic medical record. Data is filtered to identify those at risk of harm.

The service reviewed 11,500 patients between commencement in November 2022 and December 2023. Approximately 20 per cent of the patients required an intervention. These interventions involved providing a clinical recommendation to the treating team to optimise anticoagulant therapy, dosing or monitoring. Reviews were pharmacist-led with triaging and escalation of queries to the haematologists as required.

There were 308 patients classified as high risk, requiring intervention to address:

- inappropriate duplicate prescribing of anticoagulants (41 per cent)
- renal impairment on therapeutic enoxaparin (33 per cent)
- reduced platelet count and on anticoagulant or antiplatelet agent (19 per cent)
- levels of anticoagulant that were higher than the therapeutic range (6 per cent).

Feedback to the Anticoagulation Stewardship Service has been overwhelmingly positive. The Service Director of General Medicine Program stated that 'This Anticoagulation Stewardship Service is a highly valuable service, being innovative, dynamic, proactive and contributing to a strong safety culture at Monash Health'.

*Prepared on behalf of the Anticoagulation Stewardship Service by Wendy Ewing, Deputy Director of Pharmacy – Quality, Monash Health*

## Case study – complications of antipsychotic medication

Lily was admitted to the acute mental health unit as they had developed delusions and were at risk of deterioration. They had not been taking their medications, including clozapine, which was prescribed to treat their schizophrenia. Their treatment plan included titrating their clozapine dose.

During their admission, Lily developed seizures and was transferred to the medical ward. They had episodes of poor oral intake, vomiting and nausea, and they had a distended abdomen. Lily required full nursing care and they stayed on the medical ward.

Three weeks into their admission, a MET response was called due to low oxygen levels and Lily was transferred to the intensive care unit for intubation. Lily suffered massive regurgitation of fluid during the attempt to intubate them, followed by a cardiac arrest. They were unable to be resuscitated.

Lily's cause of death was determined to be due to a massive aspiration from a severe lack of movement (ileus) and blockage of the intestine. This is a known complication of clozapine, which can slow the movement of the intestine.

Review of this event found that there was a lack of knowledge and procedures within the organisation to support management of bowel habits for patients receiving clozapine. The seriousness of the gastrointestinal complications of clozapine were not well known to staff outside the mental health unit.

In response to this event, the health service has updated their clinical practise guideline and created a standardised bowel escalation plan for all patients receiving clozapine. An alert will prompt staff to commence using the bowel chart for anyone who is prescribed clozapine. They are exploring if this can be automated through their electronic medical record.

## ADVICE FOR HEALTH SERVICES

Health services must ensure their procedures and processes include monitoring for gastrointestinal adverse effects from antipsychotic medications, including clozapine.

## RESOURCE:

### High-Risk Medicines Education package

The Commission offers a series of online learning modules that focus on high-risk medicines. The modules cover medication safety topics and promote the safe management of:

- anticoagulants
- clozapine
- insulin
- opioid analgesics in acute settings
- psychotropic medicines
- anticancer medicines.

These learning modules are designed to support clinicians caring for patients prescribed high-risk medicines. They can be freely accessed by all Victorian public health service clinicians. To access the modules, sign in to the Commission's [High Risk Medicines Education](https://hrmedication.health.gov.au/login) <<https://hrmedication.health.gov.au/login>>.

## IMPROVING SYSTEM SAFETY: VICTORIAN MEDICINES ROUNDTABLE

This educational forum for clinicians who have an interest in medication safety, is held in partnership with the Victorian Therapeutics Advisory Group (VicTAG) and SCV. It provides an opportunity to discuss key medicines issues and priorities, and analysis of sentinel event themes informs the agenda.

The 2023 Roundtable was held on 5 October with the following key topics of:

- anticoagulant safety and stewardship
- medication risks at transitions of care
- managing critical medicines shortages
- high-cost medicines.

For further information visit [VicTag's Medicines Roundtable](https://victag.org.au/events/medicines-roundtable) <<https://victag.org.au/events/medicines-roundtable>>.

## ADVICE FOR CONSUMERS

You can help ensure you get the care that is right for you by being actively involved and working in partnership with healthcare providers. It is important to keep a list of all the medications you are taking, including any vitamins and supplements. You can share this list with your healthcare providers.

For more information, visit [Top tips for safe health Care](https://www.safetyandquality.gov.au/publications-and-resources/resource-library/top-tips-safe-health-care) <<https://www.safetyandquality.gov.au/publications-and-resources/resource-library/top-tips-safe-health-care>>.



## PERIOPERATIVE SENTINEL EVENTS

**Figure 12. Event categories/subcategories and patient outcomes**

EVENT CATEGORY/SUBCATEGORY	PATIENT OUTCOME	
<ul style="list-style-type: none"> <li>Category 1: Surgery or other invasive procedure performed on the wrong site resulting in serious harm or death (3)</li> </ul>	Death	19
	Experienced permanent or long-term loss of function	8
<ul style="list-style-type: none"> <li>Category 3: Wrong surgical or other invasive procedure performed on a patient resulting in serious harm or death (1)</li> </ul>	Required life-saving surgical or medical intervention	7
<ul style="list-style-type: none"> <li>Category 4: Unintended retention of a foreign object in a patient after surgery or other invasive procedure resulting in serious harm or death (4)</li> </ul>	Experienced permanent or long-term physical harm	4
	Unknown at time of notification	4
<ul style="list-style-type: none"> <li>Category 10: Use of an incorrectly positioned oro- or naso- gastric tube resulting in serious harm or death (1)</li> </ul>	Shortened life expectancy	1
<ul style="list-style-type: none"> <li>Category 11: All other adverse patient safety events resulting in serious harm or death (34)               <ul style="list-style-type: none"> <li>- Clinical process or procedure (17)</li> <li>- Recognising and responding to clinical deterioration (13)</li> <li>- Communication of clinical information (3)</li> <li>- Healthcare associated infection (1)</li> </ul> </li> </ul>		

**Figure 13. Top 7 admitting specialties and event location**



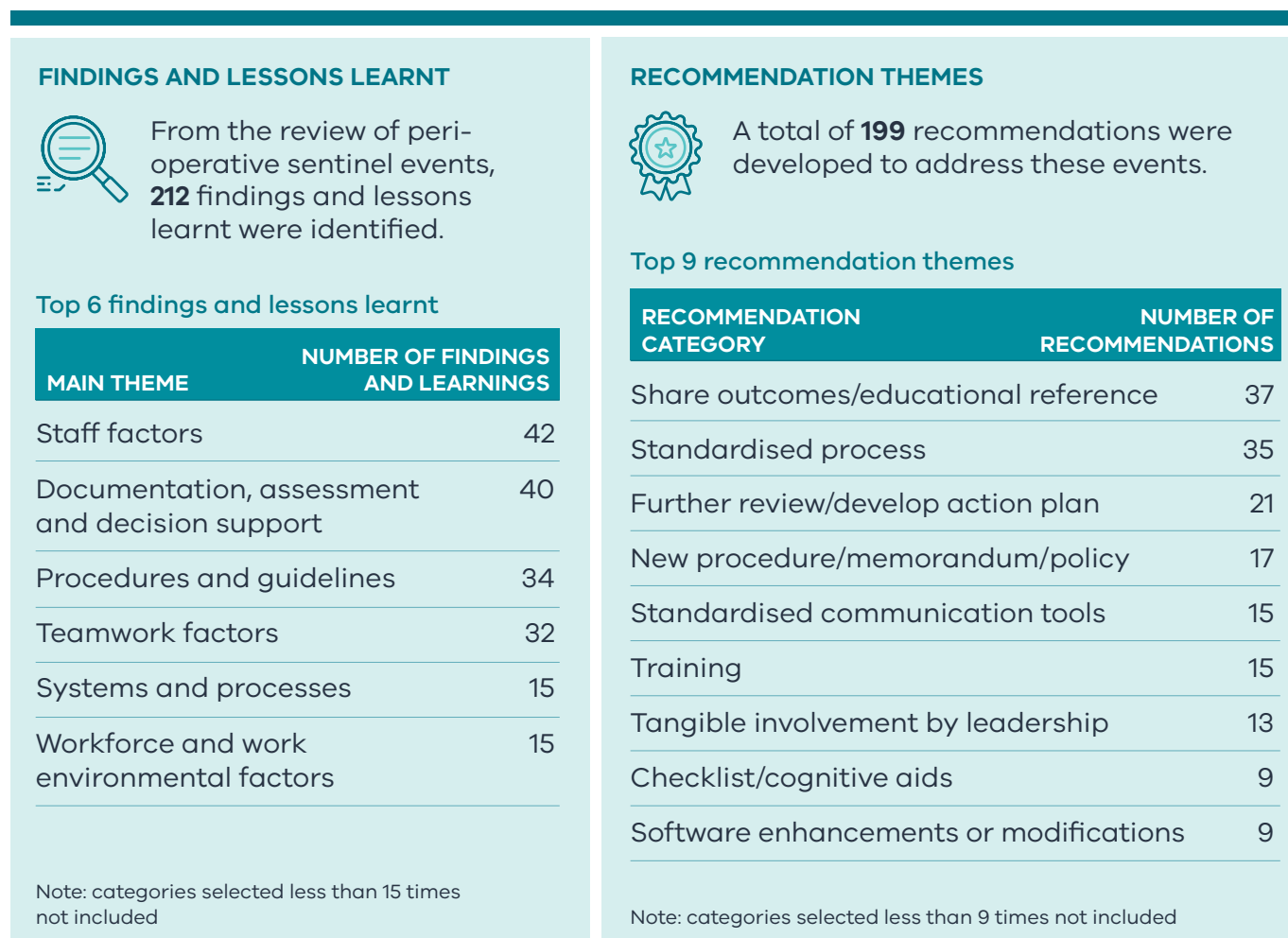
In 2022–23, there were 43 sentinel events (18 per cent) related to care in the perioperative period– immediately prior to surgery, during surgery or immediately after surgery.

Public health services reported 34 events and nine were reported by private health services.

Key event themes included:

- delayed diagnosis and intervention for a range of conditions (11), which included multiple cases of testicular torsion
- procedural complications for a range of procedures and clinical specialities (8)
- unintended retention of surgical sponges and dressings (4)
- the prevention of venous thromboembolism in surgical patients (3).

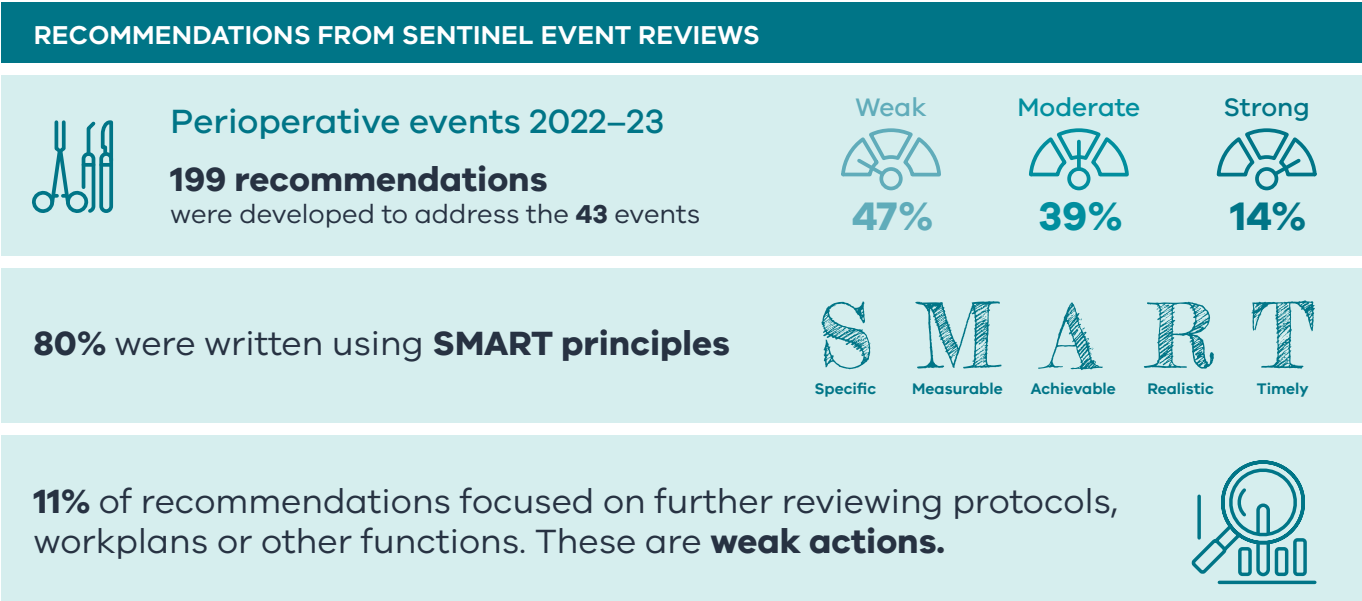
**Figure 14. Findings, lessons learnt and recommendation themes**



The review of perioperative sentinel events identified **212** findings and lessons learned that could be themed under 11 distinct categories.

A total of **199** recommendations were developed to address these events under 16 different themes. For more information, see [Recommendations from sentinel event reviews](#) in this document.

Figure 15. Perioperative recommendations



The following system improvement examples, resources and case study focus on the most common themes of 2022–23 perioperative events. These include:

- how services have come together to look at testicular torsion events
- the retention of foreign objects
- the prevention of venous thromboembolus (VTE) after surgery.

## IMPROVING SYSTEM SAFETY: TESTICULAR TORSION WORKING GROUP

Testicular torsion is a condition where the blood vessels to and from the testis twist, cutting off its blood supply. It presents with acute pain and requires emergency surgery to prevent permanent damage to the testicle. It can occur at any age, but it is most common in children, prepubescent adolescents and teenagers. The patient is usually first seen in the emergency department. When the condition is suspected, an immediate surgical referral should be made.

In 2023, SCV identified several cases of missed testicular torsion resulting in serious harm that were notified as sentinel events. Each event involved adolescents and young boys presenting with acute abdominal pain to an emergency department.

In response, the Sentinel Event Program worked with SCV's Acute Learning Health Network to release an alert to the health sector. This alert directed clinicians to the multistate paediatric improvement collaborative [Clinical Practice Guidelines](https://www.rch.org.au/clinicalguide/#tab-T) <<https://www.rch.org.au/clinicalguide/#tab-T>>, published by The Royal Children's Hospital. The alert noted that testicular torsion should always be considered when adolescents present with acute abdominal pain, and asked services to ensure staff were familiar with and had access to the guidelines.

### A health service perspective on the Testicular torsion working group: Peninsula Health

The alert prompted Peninsula Health to review a sentinel event relating to testicular torsion, alongside the multistate guidelines. In this case, following the guidelines would not have prevented the adverse outcome. This prompted us to find out if this was a problem impacting other health services. We reached out to SCV, offering to lead an aggregated review of these events with

representatives from other health services to see if there were common themes and opportunities for improvement.

The working group we formed included medical (emergency), surgical (general and urology), nursing, and quality and safety staff representing a range of private and public health services, including tertiary and regional centres. Representatives from SCV, the Victorian Perioperative Consultative Council and the Victorian Audit of Surgical Mortality also participated.

The group discussed the aligned sentinel events, key findings from their respective reviews and factors that contributed to delays in decision-making. Robust discussion about the location of care, skill mix and work as prescribed versus work as done followed. The group also reviewed data relating to these types of patient presentations.

The key findings of the working group were:

- Signs of testicular torsion can be subtle and early diagnosis is key.
- Early senior review assists with early diagnosis.
- The use of ultrasound may lead to missed or delayed diagnosis.
- Appropriate clinical assessment is a sufficient indication for surgical exploration.
- Delayed surgical review impacts timely and accurate diagnosis.
- Adolescents are likely to 'downplay' their pain. This may contribute to the tendency for clinical staff to watch and wait, rather than progressing treatment.
- Neurodivergent patients, who are commonly difficult to assess for pain levels, are at higher risk.
- There is a lack of consumer awareness of the condition, which contributes to late presentations.

The group worked well because participants communicated openly, and were driven to learn and improve patient safety. We have developed a set of recommendations that can be implemented at individual services and across the health system. We are exploring opportunities to improve public health messaging, including the introduction of education about testicular torsion for adolescents and parents.

*Prepared by Adjunct Associate Professor Shyaman Menon, Executive Director of Medical Services and Clinical Governance (Chief Medical Officer), Peninsula Health*

### **SCV's perspective on the Testicular torsion working group**

This partnership with health services was an important and valuable opportunity for us to work together. It was important to get a variety of experts together to try and address a statewide risk. We ended up with a range of findings beyond what health services had identified in reviewing these events in isolation. This is a valuable approach and SCV aims to support this type of collaborative work in the future.

#### **ADVICE FOR HEALTH SERVICES**

If you have a safety issue that you think is impacting patients across services that you would like to explore, please email [SCV <sentinel.events@safercare.vic.gov.au>](mailto:sentinel.events@safercare.vic.gov.au). We may be able to link you in with current work happening at SCV or health services, or help to build connections with other services experiencing the same issue.

### **Unintended retention of foreign objects**

In 2022–23, there were four sentinel events notified under the national Category 4: Unintended retention of a foreign object in a patient after surgery or other invasive procedure resulting in serious harm or death.

Surgical sponges and dressings were retained after surgery in these events. A retained swab can lead to infection or cause injury to other internal structures. Swabs used in the operating theatre have a radiological marker so that they show up on x-ray. The risks of leaving a swab behind at surgery is mitigated by at least two swab counts towards and at the end of surgery. The surgical safety checklist, used in all Victorian operating theatres, requires a verified swab count to be checked off (by a second nurse) as correct at the end of every procedure and confirmed with the surgical team. Protocols are in place to x-ray patients if the swab count is known to be incorrect.

In the four events in 2022–23, all counts were documented as correct, so the x-ray process was not initiated after surgery. The most common finding of the review of these events was that health service policies and procedures were missing critical information to guide count processes when there was an increased risk of an incorrect count. Examples included when a dressing was cut or modified, when staff changed during a procedure and for two-stage surgical procedures.



## ADVICE FOR HEALTH SERVICES

Health services must consider a number of recommendations to reduce the risk of retained foreign objects following surgery:

- Ensure there is always a final swab, instrument and needle count after final skin closure, and that the correctness of this final count is signed off by the nursing and surgical teams.
- Material left in a wound or cavity at the end of an operation for later removal should be appropriately documented, supplemented by a verifiable confirmation of the items being removed on the ward or elsewhere.
- Sign-out is an important part of the surgical safety checklist to ensure there is a plan of removal for any retained materials, that the intended pathology specimens are in the appropriate container and that the final swab count was correct.
- There should be clear communication as to any retained materials to be later removed on the ward, whose responsibility it is to remove them and how their complete removal is verified.
- Staff education around the surgical safety checklist and unintended retained objects should include examples where these events have occurred despite a correct count, and list key learnings and opportunities for improvement.
- Health services should have processes in place to regularly conduct visual audits of staff conducting time-out and sign-out procedures, to consistently reiterate their importance and provide timely real-time feedback.

## NEW RESOURCE:

### **My Surgical Journey**

If you're thinking about having surgery or are on a planned surgery preparation list, there is a new resource available to support you. SCV, in collaboration with the Department of Health, clinicians and consumers, has codesigned the [My Surgical Journey resource](https://www.safercare.vic.gov.au/consumer-resources/my-surgical-journey) <<https://www.safercare.vic.gov.au/consumer-resources/my-surgical-journey>>. This resource guides you through every stage of your surgical journey to help you achieve the best outcome.

My Surgical Journey supports shared decision-making, using icons to prompt questions you can ask or questions you might be asked across your surgical journey. It focuses on informing you about what to expect and includes different elements to provide information, including videos, checklists and translations.

## Prevention of venous thromboembolus (VTE) after surgery

In 2022–23, three sentinel events related to the prevention of venous thromboembolism in surgical patients. The following case study demonstrates this issue. For more information, see [Venous Thromboembolism Guideline](#) in this document.

### Case study – VTE after orthopaedic surgery

Samira was admitted to Health Service A with an injury to her right leg after falling from a step. An x-ray showed a significantly displaced fracture of her ankle and she was admitted for surgery. She had a history of a blood clot in the lungs (pulmonary embolus) after surgery 12 years ago, but this was not documented during her admission and her body mass index (BMI) was greater than 35.

She was given 60mg subcutaneous enoxaparin (an increased dose related to her BMI) the following morning and proceeded to surgery that evening. Postoperatively she was to be non-weight bearing, given 24 hours of intravenous antibiotics, and to continue enoxaparin. She received 60mg of subcutaneous enoxaparin daily for three days prior to her discharge.

On her day of discharge, the pharmacist identified that Samira was at elevated risk of developing VTE when reviewing her medications for discharge. The plan to prescribe aspirin instead of enoxaparin was initially discussed with the intern, who then consulted with the registrar for advice. They decided to discharge her home with aspirin.

Two weeks later, Samira returned to Health Service A via ambulance with left chest pain due to a massive pulmonary embolus. She deteriorated in the emergency department, requiring resuscitation, and was transferred to Health Service B for advanced life support. She survived, but spent the next four weeks in hospital, for much of the time requiring multiorgan support.


Aspirin may be a suitable agent for low risk patients with foot and ankle fractures. However, Samira had had a previous pulmonary embolus and a high BMI, both of which made her high risk.

Health Service A's review of this event found that, despite being high risk, inadequate VTE prophylaxis was given to Samira to cover her after discharge. The organisation's care pathway was not followed, as she was not referred to the haematology team to discuss tailored VTE prophylaxis, as per their guidelines for higher-risk patients. There was a discrepancy between the organisational guideline and the advice on the local tool supporting VTE prophylaxis. These resources were difficult to access and there was no formal assessment tool for VTE risk at discharge.

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# Engaging with impacted patients, families and carers


**When a sentinel event occurs, health services are required to invite the impacted patient, family or carer to provide their feedback on what occurred, and any concerns or questions they would like considered in the review. This information gives valuable insight into the circumstances of what happened and the factors contributing to the event, but most importantly, offers potential solutions or recommendations to reduce the likelihood of a similar event occurring in the future.**

In 2022–23, impacted patients, their families or carers contributed to 145 reviews (59 per cent), an increase from 47 per cent of sentinel event reviews in 2021–22. 

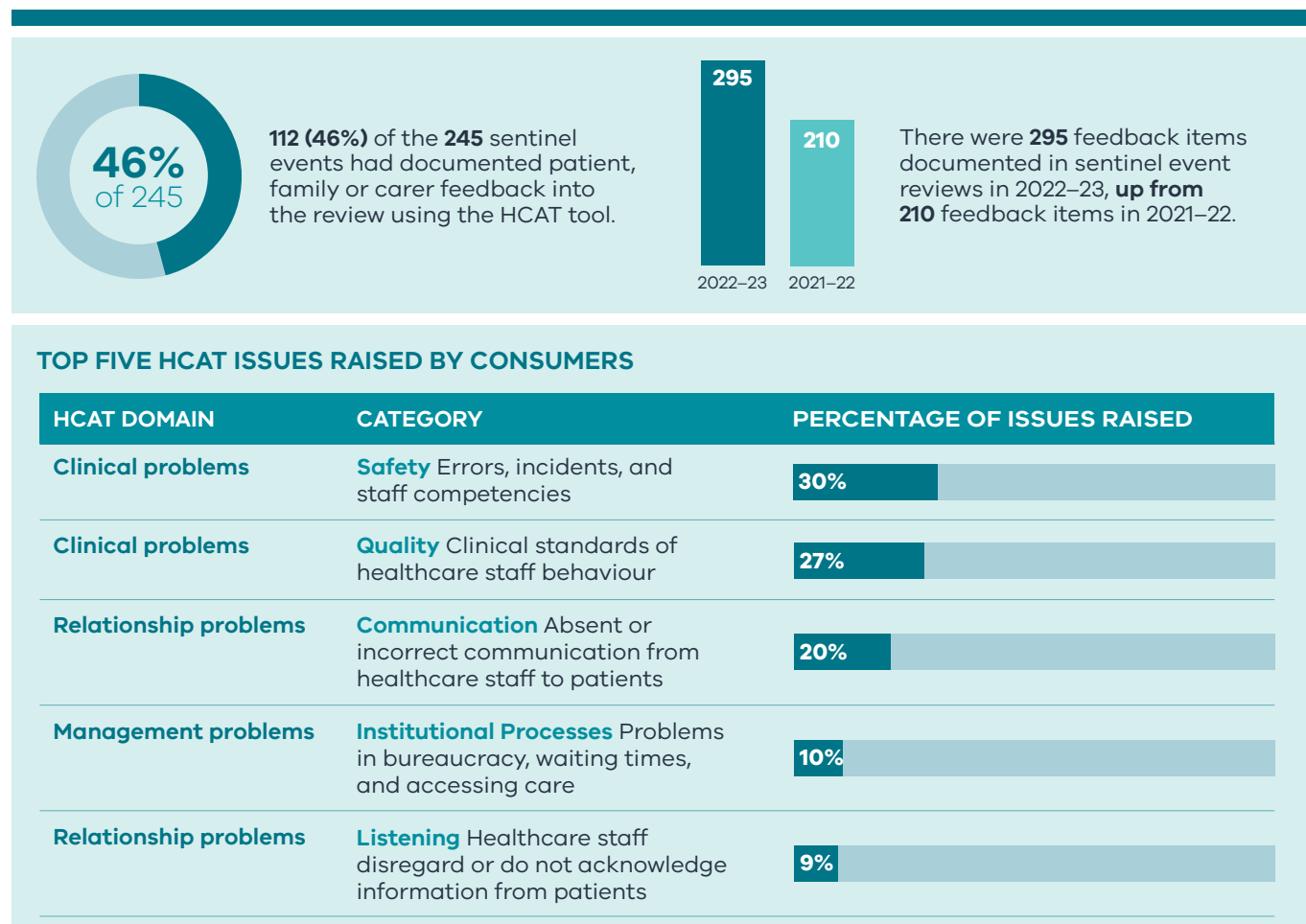
## THE HEALTHCARE COMPLAINTS ANALYSIS TOOL (HCAT)

The sentinel events portal has embedded the [HCAT <https://healthcarecomplaintsanalysis.com>](https://healthcarecomplaintsanalysis.com) to capture the feedback consumers provide through this process. This evidence-based tool is used to code consumer feedback. We can capture this data in detail by breaking down the feedback into the HCAT domain and category.

Of the 245 sentinel events in 2022–23, 112 (46 per cent) had documented patient, family or carer feedback into the review using the HCAT.

There were 295 feedback items captured in sentinel event reviews in 2022–23, up from 210 feedback items in 2021–22. 

**Figure 16. The Healthcare Complaints Analysis Tool (HCAT)**

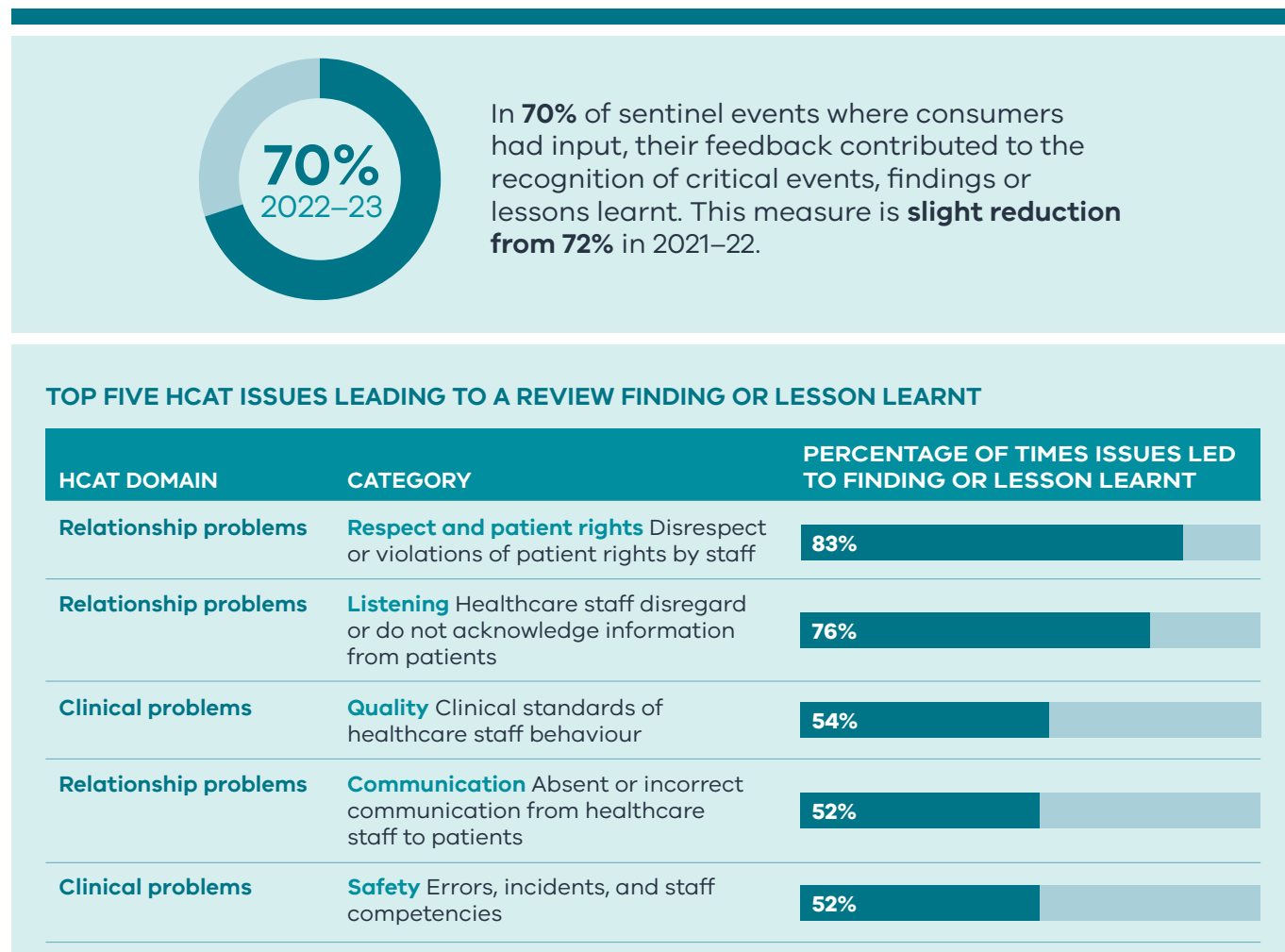


## Responding to feedback

In 70 per cent of sentinel events where consumers had input, their feedback contributed to the recognition of critical events, findings or lessons learnt. This measure is a slight reduction from 72 per cent in 2021–22, but continues to show the importance of including patients' and families' voices in the review process.

Through HCAT data collection, we can see which patient issues raised were most likely to contribute to a review finding or lesson learnt, as reflected in Figure 17.

**Figure 17. Responding to feedback**



For more information about how SCV uses the HCAT in understanding consumer feedback, visit [Thematic interrogation of patient complaints in the state of Victoria](https://www.safercare.vic.gov.au/best-practice-improvement/publications/thematic-interrogation-of-patient-complaints-in-the-state-of-victoria) <<https://www.safercare.vic.gov.au/best-practice-improvement/publications/thematic-interrogation-of-patient-complaints-in-the-state-of-victoria>>.

## STATUTORY DUTY OF CANDOUR (SDC)

From 30 November 2022, when a patient is harmed by a serious adverse patient safety event (SAPSE), including sentinel events, the health service responsible must, by law:

- apologise to the affected consumer and/or their family, carer or significant others
- explain what went wrong
- describe what action will be taken and what improvements will be put in place
- offer a copy of any report completed as part of a review of what happened.

This legal responsibility is called the SDC and there are key requirements and timelines health services must follow, as outlined within the Victorian Duty of Candour Guidelines.

For more information, visit [Statutory Duty of Candour and protections for SAPSE reviews](https://www.safercare.vic.gov.au/report-manage-issues/sentinel-events/adverse-event-review-and-response/duty-of-candour) <<https://www.safercare.vic.gov.au/report-manage-issues/sentinel-events/adverse-event-review-and-response/duty-of-candour>>.

### **A health service perspective on SDC: The Royal Women's Hospital (The Women's)**

The SDC has been positive for The Women's and it has guided us in making changes to the way we do things.

We developed our own internal SDC processes and documented these in a new guideline.

We established a SAPSE huddle that is called when an adverse event is identified. At the huddle, we decide what sort of review is required and if the SDC process must be followed.

We use the huddle to:

- ensure open disclosure has begun
- alert our consumer liaison team to contact the patient, their family or carer
- determine who will be on the panel to review the event.

We ran a program of open disclosure training for 100 of our clinicians and senior clinical leaders. The training was aimed at improving our ability to have difficult conversations in a sensitive way.

We have developed resources to support staff involved in a SAPSE with information about SDC, review processes and support available. We have also further developed our critical incident response processes, including how debriefing occurs.

When an adverse event occurs and a patient has been harmed, rebuilding trust with the impacted patient and their family is critical. We do this through:

- transparency: the SDC process has encouraged a cultural shift in our openness with patients and their families, and we see immense value in sharing our review findings with them. Where we believe it will be beneficial, we have also begun providing reports to patients who have experienced other types of adverse events, beyond the SDC requirements
- robust review: feedback from our consumers tells us they are grateful for the seriousness with which the hospital handles adverse events and reassured by the thoroughness of our review processes.
- involving consumers: one of the first steps in our SDC process is asking the impacted patients and their families what questions they would like answered through the review process. We have found that expanding the review to include questions asked by patients has added value to the process.

We have changed the way we draft our reports so they are more patient focused. We routinely meet with the patient and family to go through the report so they receive this information in a supported way.

The SDC process has presented some implementation challenges in sensitive and complex cases.

The timeframes are a challenge. Not every family is ready to speak to staff within three business days of an event occurring. It can take weeks to arrange a review panel, which impacts on when reports are complete and ready to be shared with patients or their families. We always prioritise the patient and arrange the process around their needs and preferences.

The legislation requires the patient to sign a form to opt out of the SDC process. We have had situations where we have not been able to contact the patient. We aim to strike a balance between making reasonable attempts to contact them and being respectful of their grief and trauma. There is currently no way to capture our attempts to contact the patient in the data we submit to SCV to demonstrate our SDC compliance.

Our Board has made an explicit commitment to ensure the SDC process is patient centred and that all decisions are made in the best interests of the patient.

*Prepared by Catherine Jones. Director Quality and Safety, The Royal Women's Hospital*

### SDC reporting

The impact of SDC is being measured through data submitted by health services. At the time of writing this report, two quarters worth of data have been received, with 149 health services submitting data.

These are new measures and we expect to see continuous improvement over time. SCV has engaged a university partner to formally evaluate the intent of the legislation. We will use the results of this evaluation, ongoing analysis of the data submitted, and feedback from services and consumers, to refine what we collect and to inform future amendments to the legislation.

### ADVICE FOR HEALTH SERVICES

Ensure your service has an internal process for cases where you cannot obtain a signed opt-out statement, or it is difficult to contact the patient, and that this is documented.

Where there are delays in meeting key SDC timelines, ensure this is communicated to the patient and they have the details of a point of contact in your organisation.


### NEW RESOURCE:

#### Consumer resources for SDC


SCV partnered with the Health Issues Centre to develop [Duty of Candour resources for patients, families and their carers](https://www.safercare.vic.gov.au/consumer-resources/duty-of-candour-resources-for-patients-families-and-their-carers) <<https://www.safercare.vic.gov.au/consumer-resources/duty-of-candour-resources-for-patients-families-and-their-carers>>, which help in understanding the SDC and the key timelines health services must follow throughout the process. These were developed with a patient advisory group, including lived experience members, carers and impacted families. The resources have been translated into 10 languages.

## OPEN DISCLOSURE

Open disclosure is the open and transparent discussion with a patient, their family and carers, which occurs after an adverse event. Open disclosure data for sentinel events in 2022–23 demonstrates significant improvement by health services and the intent of the SDC changes.

For sentinel events notified in 2022–23, health services reported that they had completed open disclosure at six months for 58 per cent of events, up from 35 per cent in 2021–22. 

At the six-month update, following open disclosure, health services:

- had provided the patient, family or carer with a full copy of the review report in 46 per cent of events, up from 9 per cent in 2021–22. 
- reported that 91 per cent of patients, families or carers said they were satisfied with the outcome of the review.




# Recommendations from sentinel event reviews

### Developing recommendations

Following a sentinel event review, the review panel develops recommendations and sets out an action plan for implementing these recommendations. These recommendations aim to reduce the risk of similar events recurring and to improve quality and safety of patient care.

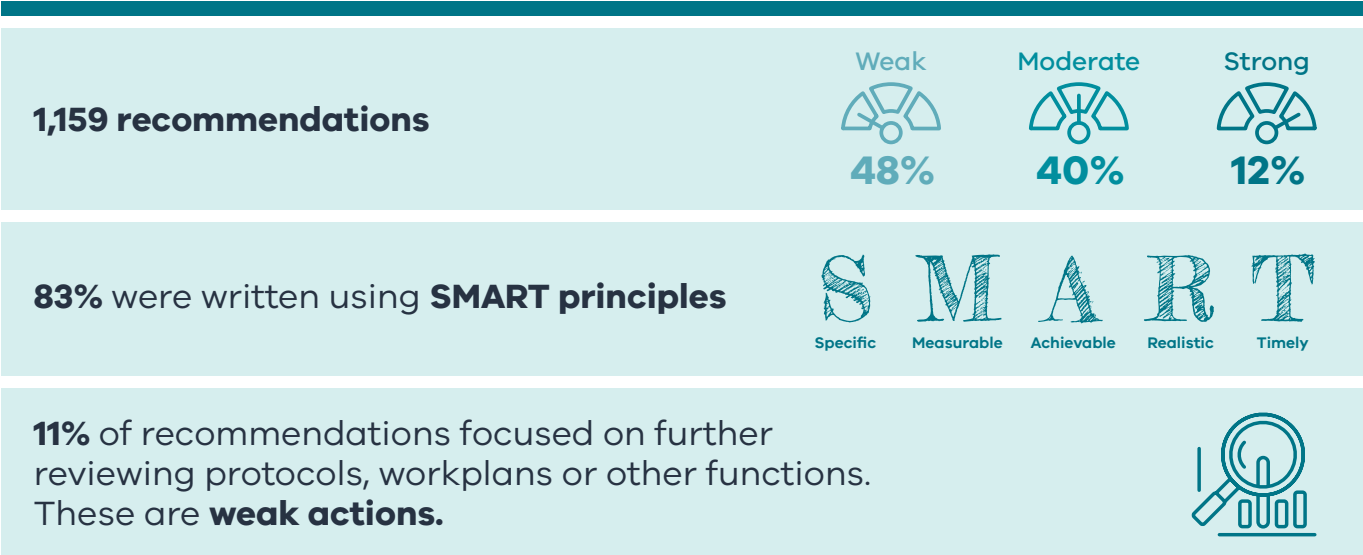
### Writing recommendations

Recommendations should be written and developed in accordance with SMART (specific, measurable, achievable, realistic, timely) principles. When analysed, 83 per cent of overall recommendations were regarded as SMART recommendations. This is an increase from 61 per cent in 2021–22. 

### Recommendation strength

Recommendations are classified according to the level of tangible impact that the actions outlined in the recommendation will have within the health service. Moderate and strong recommendations focus on changing the design of systems to support human performance more effectively.

Figure 18. Recommendations from sentinel event review 2022–23



We have seen improvement over time in the strength of recommendations made by health services reviewing sentinel events. This year (2022–23), combined strong and moderate recommendations make up 52 per cent of the total. Combined strong and moderate recommendations made up 27 per cent of recommendations in 2018–19. ☆☆☆

For more information, see [Guide to strength of recommendations](#) in this document.

### Progress of recommendations

Health services provide SCV with a report six months after notifying a sentinel event and again at 12 months, if required. This monitoring report describes the progress made against each of the recommendations from the review of the event and identifies any barriers to completion.

This report considers the progress of recommendations made in 2021–22 over 12 months, and the six-month updates for recommendations made in 2022–23.

Review of recommendation monitoring reports submitted at 12 months after sentinel events occurring in 2021–22 showed:

- 74 per cent of recommendations were completed (with 38 per cent completed at six months)
- 20 per cent of recommendations remained in progress
- two per cent of recommendations were on hold
- four per cent of recommendations had been abandoned
- the average time to close a recommendation was 186 days.

For the recommendations made in 2022–23 at six-month monitoring:

- 35 per cent of recommendations were completed
- 60 per cent of recommendations remained in progress
- a small portion of recommendations (3 per cent) had been placed on hold, with the most common reasons cited as completing higher priority actions or resource challenges within the reporting health services
- two per cent of recommendations had been abandoned, with the primary reason being that the gap was addressed through another recommendation (50 per cent).

SCV has been working to establish better processes for monitoring the progress of recommendations by health services. Health services can expect more communication from SCV around these metrics over 2024 and 2025.

## ADVICE FOR HEALTH SERVICES

Health services must have robust systems of governance and executive sponsorship of sentinel event recommendation actions to ensure completion is on time and to a high degree of quality.

Consider having clear SMART recommendations that will have the most impact, rather than recommendations that do not describe accountability.

A lack of moderate or strong recommendation from a review may be a sign that findings are focused on human action or inaction, due to the depth of analysis insufficiently exploring underlying factors.

Recommendations addressing a high safety risk, such as elevated risk of recurrence, with potential serious consequence, should be assigned immediate resource and priority, compared to lower safety risk actions.

For more information on developing recommendations, visit:

- [Managing adverse events | Safer Care Victoria](https://www.safercare.vic.gov.au/report-manage-issues/managing-adverse-events) <<https://www.safercare.vic.gov.au/report-manage-issues/managing-adverse-events>>
- [Adverse Patient Safety Event guideline](https://www.safercare.vic.gov.au/best-practice-improvement/publications/policy-adverse-patient-safety-events) <<https://www.safercare.vic.gov.au/best-practice-improvement/publications/policy-adverse-patient-safety-events>>.

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# Further reading and resources

**SCV has resources and information available to support healthcare services and consumers to improve safety culture and prevent patient harm.**

## Resources for health services and leaders:

- [Clinical governance framework](https://www.safercare.vic.gov.au/best-practice-improvement/publications/clinical-governance-framework) <<https://www.safercare.vic.gov.au/best-practice-improvement/publications/clinical-governance-framework>>
- [Victorian Safety Culture Guideline](#)
- [Adverse Patient Safety Events Policy](https://www.safercare.vic.gov.au/best-practice-improvement/publications/policy-adverse-patient-safety-events) <<https://www.safercare.vic.gov.au/best-practice-improvement/publications/policy-adverse-patient-safety-events>>
- [Adverse Patient Safety Event guideline](https://www.safercare.vic.gov.au/best-practice-improvement/publications/policy-adverse-patient-safety-events) <<https://www.safercare.vic.gov.au/best-practice-improvement/publications/policy-adverse-patient-safety-events>>
- [Partnering in healthcare framework](https://www.safercare.vic.gov.au/publications/partnering-in-healthcare) <<https://www.safercare.vic.gov.au/publications/partnering-in-healthcare>>
- [ACSQHC incident management and sentinel events](https://www.safetyandquality.gov.au/our-work/indicators-measurement-and-reporting/incident-management-and-sentinel-events) <<https://www.safetyandquality.gov.au/our-work/indicators-measurement-and-reporting/incident-management-and-sentinel-events>>
- [Managing adverse events](https://www.safercare.vic.gov.au/report-manage-issues/managing-adverse-events) <<https://www.safercare.vic.gov.au/report-manage-issues/managing-adverse-events>>
- [Guides to consumer representatives on adverse event reviews](https://www.safercare.vic.gov.au/best-practice-improvement/publications/guides-to-consumer-representatives-on-adverse-event-reviews) <<https://www.safercare.vic.gov.au/best-practice-improvement/publications/guides-to-consumer-representatives-on-adverse-event-reviews>>
- [Learning and education: Fundamentals of adverse patient safety event review](https://www.safercare.vic.gov.au/e-learning/fundamentals) <<https://www.safercare.vic.gov.au/e-learning/fundamentals>>
- [Learning and education: Engaging with impacted consumers](https://www.safercare.vic.gov.au/e-learning/consumer) <<https://www.safercare.vic.gov.au/e-learning/consumer>>
- [The Australian Open Disclosure Framework](https://www.safetyandquality.gov.au/our-work/open-disclosure/the-open-disclosure-framework#australian-open-disclosure-nbsp-framework) <<https://www.safetyandquality.gov.au/our-work/open-disclosure/the-open-disclosure-framework#australian-open-disclosure-nbsp-framework>>
- [Online training modules – SDC](https://www.safercare.vic.gov.au/report-manage-issues/sentinel-events/adverse-event-review-and-response/duty-of-candour) <<https://www.safercare.vic.gov.au/report-manage-issues/sentinel-events/adverse-event-review-and-response/duty-of-candour>>
- [Learning and education: SDC](https://www.safercare.vic.gov.au/e-learning/duty-of-candour) <<https://www.safercare.vic.gov.au/e-learning/duty-of-candour>>
- [About the sentinel events portal](https://www.safercare.vic.gov.au/report-manage-issues/sentinel-events/about-the-sentinel-events-portal) <<https://www.safercare.vic.gov.au/report-manage-issues/sentinel-events/about-the-sentinel-events-portal>>
- [Just Culture resources](https://www.safercare.vic.gov.au/report-manage-issues/sentinel-events/adverse-event-review-and-response/just-culture-training-and-resources) <<https://www.safercare.vic.gov.au/report-manage-issues/sentinel-events/adverse-event-review-and-response/just-culture-training-and-resources>>
- [Thematic interrogation of patient complaints in Victoria](https://www.safercare.vic.gov.au/best-practice-improvement/publications/thematic-interrogation-of-patient-complaints-in-the-state-of-victoria) <<https://www.safercare.vic.gov.au/best-practice-improvement/publications/thematic-interrogation-of-patient-complaints-in-the-state-of-victoria>>

### Resources for patients, families and carers:

- What are adverse and sentinel events? <<https://www.safercare.vic.gov.au/consumer-resources/what-adverse-sentinel-events>>
- Resources for involving impacted consumers <<https://www.safercare.vic.gov.au/report-manage-issues/sentinel-events/adverse-event-review-and-response/resources-for-involving-impacted-consumers>>
- Guides to consumer representatives on adverse event reviews <<https://www.safercare.vic.gov.au/best-practice-improvement/publications/guides-to-consumer-representatives-on-adverse-event-reviews>>
- Duty of Candour resources for patients, families and their carers <<https://www.safercare.vic.gov.au/consumer-resources/duty-of-candour-resources-for-patients-families-and-their-carers>>

# Glossary

Terminology	Definition
<b>Adverse patient safety event/adverse event</b>	An incident in which a person receiving healthcare is harmed. For more information on responding to an adverse event, visit <a href="https://www.safercare.vic.gov.au/report-manage-issues/managing-adverse-events">Managing adverse events</a> <https://www.safercare.vic.gov.au/report-manage-issues/managing-adverse-events>
<b>Anticoagulants</b>	A group of medicines that work by reducing the ability of the blood to clot
<b>APINCHS</b>	The 'APINCHS' acronym and classification assists clinicians to focus on a group of medicines known to be associated with high potential for medication-related harm. It stands for: <b>A</b> Antimicrobials <b>P</b> Potassium and other electrolytes <b>I</b> Insulin <b>N</b> Narcotics (opioids) and other sedatives <b>C</b> Chemotherapeutic agents <b>H</b> Heparin and other anticoagulants <b>S</b> Systems for medication safety
<b>BMI</b>	Body mass index
<b>Carer</b>	A person who provides unpaid care and support to either a family member or friend who has a disability, mental illness, chronic condition, terminal illness or general frailty
<b>Critical event</b>	Identified when reviewing an adverse event, it is the point at which a different action would have altered the subsequent sequence of events and the outcome of patient harm
<b>Harm</b>	Physical or psychological damage or injury to a person. Examples of harm are disease, suffering, impairment (disability) and death
<b>Haematology</b>	The study of blood in health and disease
<b>HCAT</b>	Healthcare Complaints Analysis Tool – an evidence-based, standardised tool for systematically coding consumer voice, organising and analysing complaints information to reliably assess healthcare problems, their severity and the level of patient-reported harm. The HCAT can be used for service monitoring, organisational learning and research into complaints, and is an early indicator for patient safety risks
<b>Healthcare consumer</b>	A patient, their family or carer(s)
<b>Human factors</b>	Human factors refer to the environmental, organisational, human and job factors that influence human performance. The science of human factors applies theory, data, and methodologies to understand interactions among humans and the systems in which they work
<b>ICPS</b>	International Classification for Patient Safety – refers to <a href="https://www.who.int/publications/i/item/WHO-IER-PSP-2010.2">The conceptual framework for the international classification for patient safety</a> <https://www.who.int/publications/i/item/WHO-IER-PSP-2010.2> – a framework developed by the World Health Organization to enable categorisation of patient safety information using standardised sets of concepts with agreed definitions, preferred terms and the relationships between them. The Victorian Category 11 sentinel event subcategories are based on the ICPS classification for incident type

Terminology	Definition
<b>Just culture</b>	Just culture encourages balanced accountability between organisations and individuals, and the application of systems-thinking principles to allow fair and just responses to adverse events
<b>Lessons learnt</b>	The opportunities for improvement identified through the review process, but that were not contributory to the adverse event
<b>MET</b>	Medical emergency team
<b>Multi-agency review</b>	A panel review of a SAPSE that involves two or more health service entities. All services involved in the harm of the patient are expected to participate in the review panel
<b>Open disclosure</b>	The open and transparent discussion of adverse events that result in harm to a patient while receiving health care with the patient, their family and carers
<b>Peer group</b>	Grouping of health services of comparable size or clinical capability to allow for accurate comparison for the purpose of data reporting
<b>PIPER</b>	Paediatric Infant Perinatal Emergency Retrieval
<b>Pulmonary embolus</b>	A blood clot in the lungs
<b>RCH</b>	The Royal Children's Hospital
<b>Reporting culture</b>	An environment where individuals have the confidence and feel safe to report safety issues without fear of blame, and where they can trust their concerns will be acted on
<b>Reporting mechanism</b>	User friendly, timely and enable closed loop communication with affected employees
<b>Review finding</b>	A summary statement that describes how a system issue or factor contributed to an adverse patient safety event
<b>Recommendation strength</b>	The level of tangible impact that the actions outlined in the recommendation will have within the health service
<b>Safety culture</b>	The individual and group values, attitudes, and behaviours that determine the commitment to and practice of organisational safety
<b>SAPSE</b>	Serious adverse patient safety event
<b>SCV</b>	Safer Care Victoria
<b>SDC</b>	Statutory Duty of Candour

Terminology	Definition
<b>Sentinel event</b>	The most serious adverse events, which result in a patient dying or being seriously harmed
<b>SMART</b>	This acronym stands for specific, measurable, achievable, realistic, timely
<b>Speciality</b>	A branch of medical practice that focuses on a defined group of patients, diseases or skills
<b>the Commission</b>	<a href="https://www.safetyandquality.gov.au">Australian Commission on Safety and Quality in Health Care &lt;https://www.safetyandquality.gov.au&gt;</a> – a Commonwealth entity for quality and safety in healthcare that sets the national sentinel event notification list
<b>Thromboembolus</b>	When a blood clot forms in an artery or vein
<b>Thromboprophylaxis</b>	Medical treatment to prevent the development of thrombus (blood clots inside blood vessels) in those considered at risk for developing thrombus
<b>VicTAG</b>	<a href="https://www.victag.org.au">Victorian Therapeutics Advisory Group &lt;https://www.victag.org.au&gt;</a> – an organisation whose purpose is to promote quality use of medicines by sharing unbiased, evidence-based information about medication therapy and to support the goals of, and facilitate the National Medicines Policy of, access, quality and safety in the use of medicines in Victorian hospitals
<b>VTE</b>	Venous thromboembolus – a pathology that includes deep vein thrombosis and pulmonary embolism, which are common causes of preventable mortality and morbidity among hospitalised patients. A blood clot forming in the vein is a common cause of harm in hospitalised patients
<b>VVED</b>	Victorian Virtual Emergency Department



# Data supplement

Data within this report and data supplement has been compared to previous years, where possible. The number of years that can be included for comparison varies between indicators. This is due to changes to the reporting requirements for health services and the methods for collecting this data over time.

Most notably these are:

- 2019–20 revised national sentinel event categories published. Updated guidance published by SCV on reporting and consumer inclusion
- 2021–22 introduction of the online sentinel events reporting portal for event reporting, and increased data collection and comparison.

## Sentinel events reporting by category and subcategory

**Table 2. Sentinel event notification by category 2021–22 and 2022–23**

Category	2021–2022	2022–2023
1. Surgery or other invasive procedure performed on the wrong site resulting in serious harm or death	1	3
2. Surgery or other invasive procedure performed on the wrong patient resulting in serious harm or death	0	0
3. Wrong surgical or other invasive procedure performed on a patient resulting in serious harm or death	2	1
4. Unintended retention of a foreign object in a patient after surgery or other invasive procedure resulting in serious harm or death	2	4
5. Haemolytic blood transfusion reaction from ABO incompatibility resulting in serious harm or death	1	0
6. Suspected suicide of a patient in an acute psychiatric unit or acute psychiatric ward	6	2
7. Medication error resulting in serious harm or death	16	22
8. Use of physical or mechanical restraint resulting in serious harm or death	0	0
9. Discharge or release of an infant or child to an unauthorised person	0	0
10. Use of an incorrectly positioned orogastric or nasogastric tube resulting in serious harm or death	0	3
11. All other adverse patient safety events resulting in serious harm or death	212	210
<b>Total</b>	<b>240</b>	<b>245</b>

We use subcategories based on the World Health Organization's International Classification for Patient Safety (ICPS) for events notified under the Victorian-only Category 11.

**Table 3. Sentinel event notifications as a percentage of all Category 11 events 2021–22 and 2022–23**

Subcategory	2020–2021 (%)	2022–23 (%)
Recognising and responding to clinical deterioration	34	33
Clinical process or procedure	29	28
Falls	15	9
Healthcare-associated infection	4	9
Self-harm	5	7
Communication of clinical information	6	6
Resource or organisational management	4	5
Medical device or equipment	1	2
Patient accident	1	2
Nutrition	0	0

Note: Totals not 100% due to rounding

In 2022–23, we observed:

- a reduction in Category 6 – suspected suicide events, with an increase in Category 11 – self-harm events, the total for both event types was steady at 17 events per year for 2021–22 and 2022–23
- an increase in Category 7 – medication error events, with further analysis in the body of this report
- an increase in Category 11 – healthcare-associated infection events. This increase was partially due to some infection outbreaks impacting multiple patients, resulting in multiple sentinel event notifications
- a reduction in the notification of Category 11 – falls events, the notification of events under this category was paused from 1 November 2022 to 27 February 2024

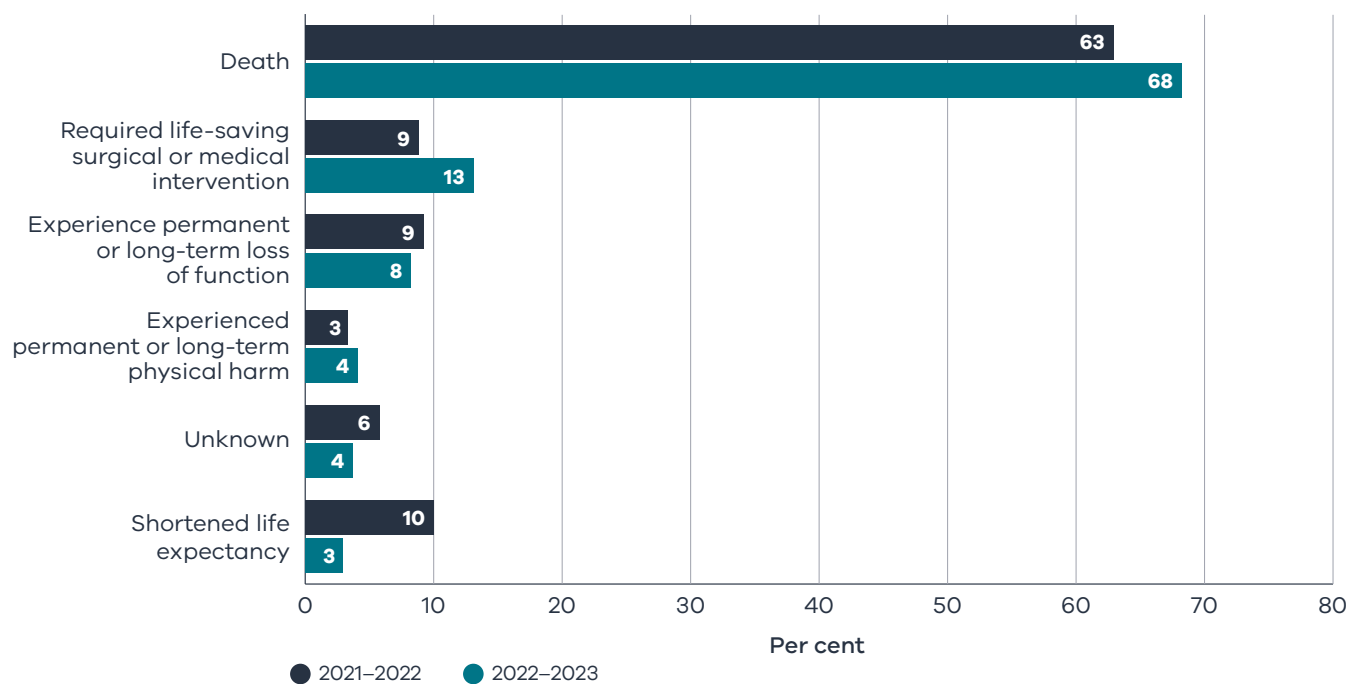
## Patient outcome

There were 68 per cent of sentinel events in 2022–23 reported to have resulted in the patient's death.

Health services are required to indicate the degree of harm to the patient when they notify sentinel events. The full degree of the impact

of the event may not be known at the time of notification and the patient outcome is not expected to be updated again throughout the review.

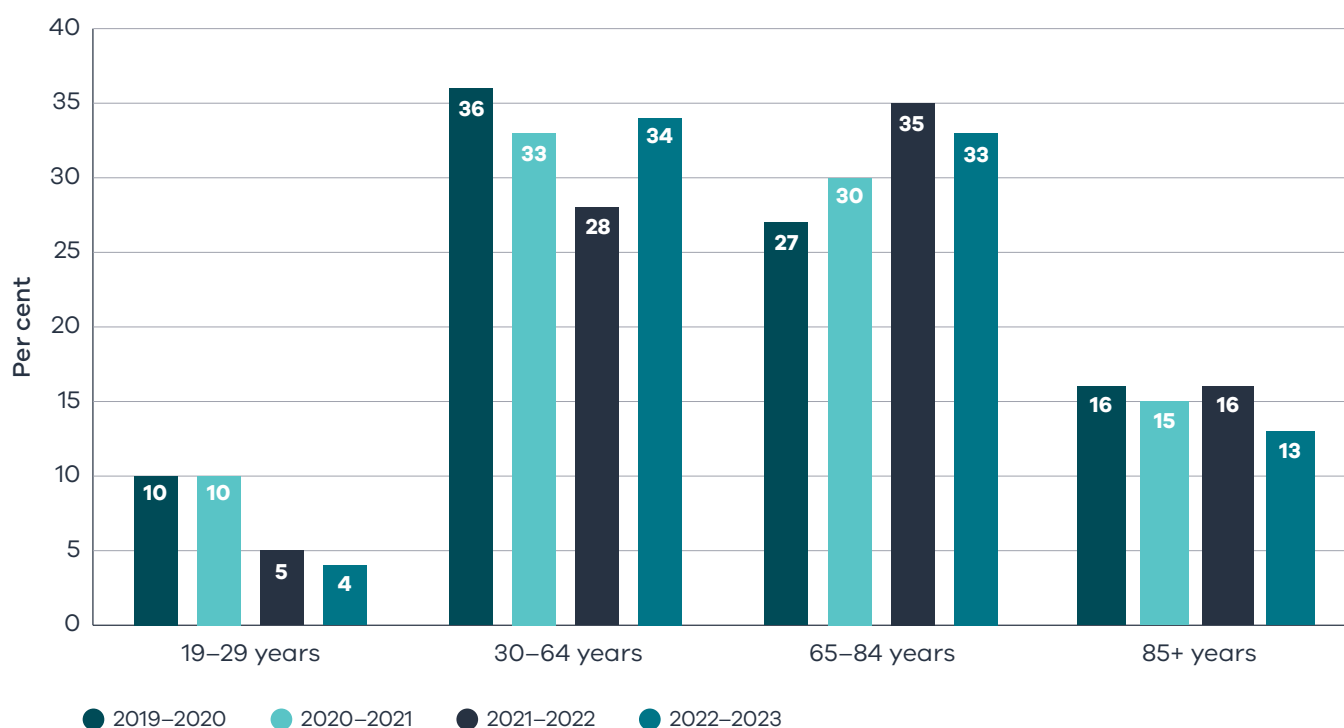
**Figure 19. Patient outcome by percentage of total sentinel events 2021–22 and 2022–2023**



### Age of affected patient

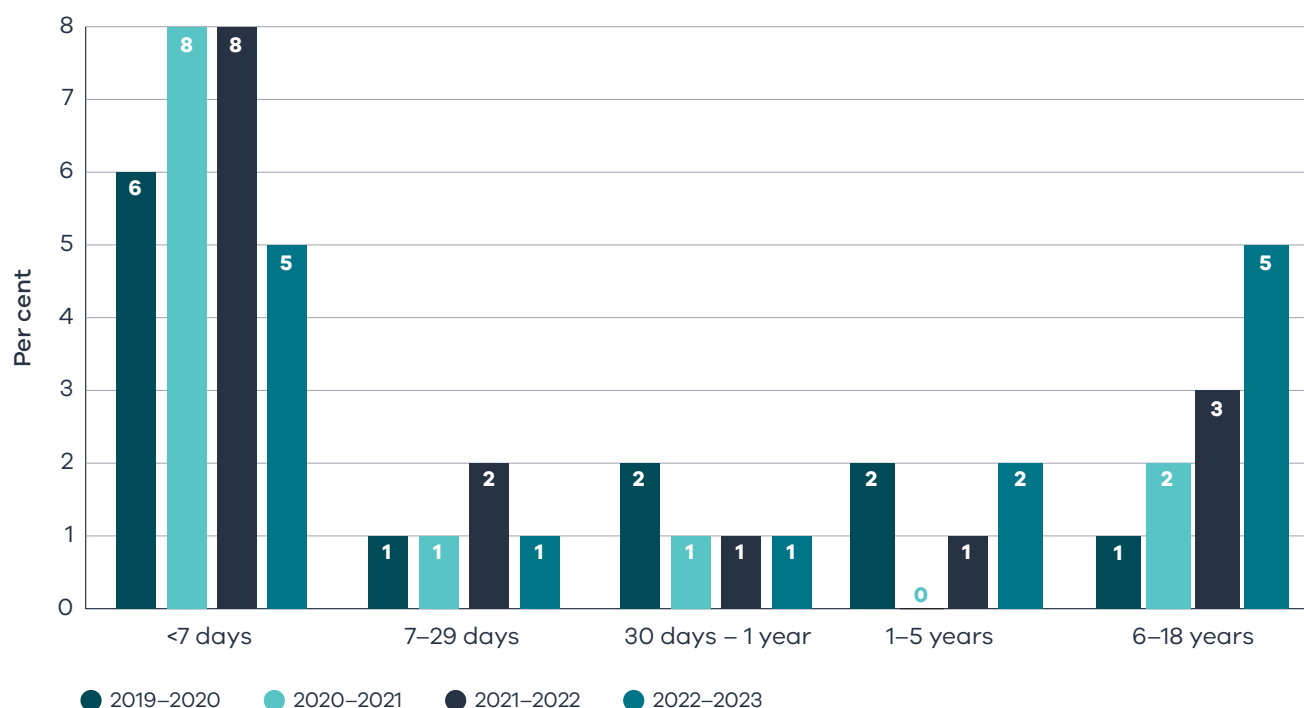
Sentinel events affect patients of all ages.  
In 2022–23, 210 events affected adults and  
35 affected babies, children and adolescents.

**Figure 20. Age (years) of adults affected by sentinel events by percentage of total sentinel events 2019–20 to 2022–23**



Note: Totals of figures 20 and 21 not 100% due to rounding

**Figure 21. Age of paediatric patients affected by sentinel events by percentage of total sentinel events 2019–20 to 2022–23**

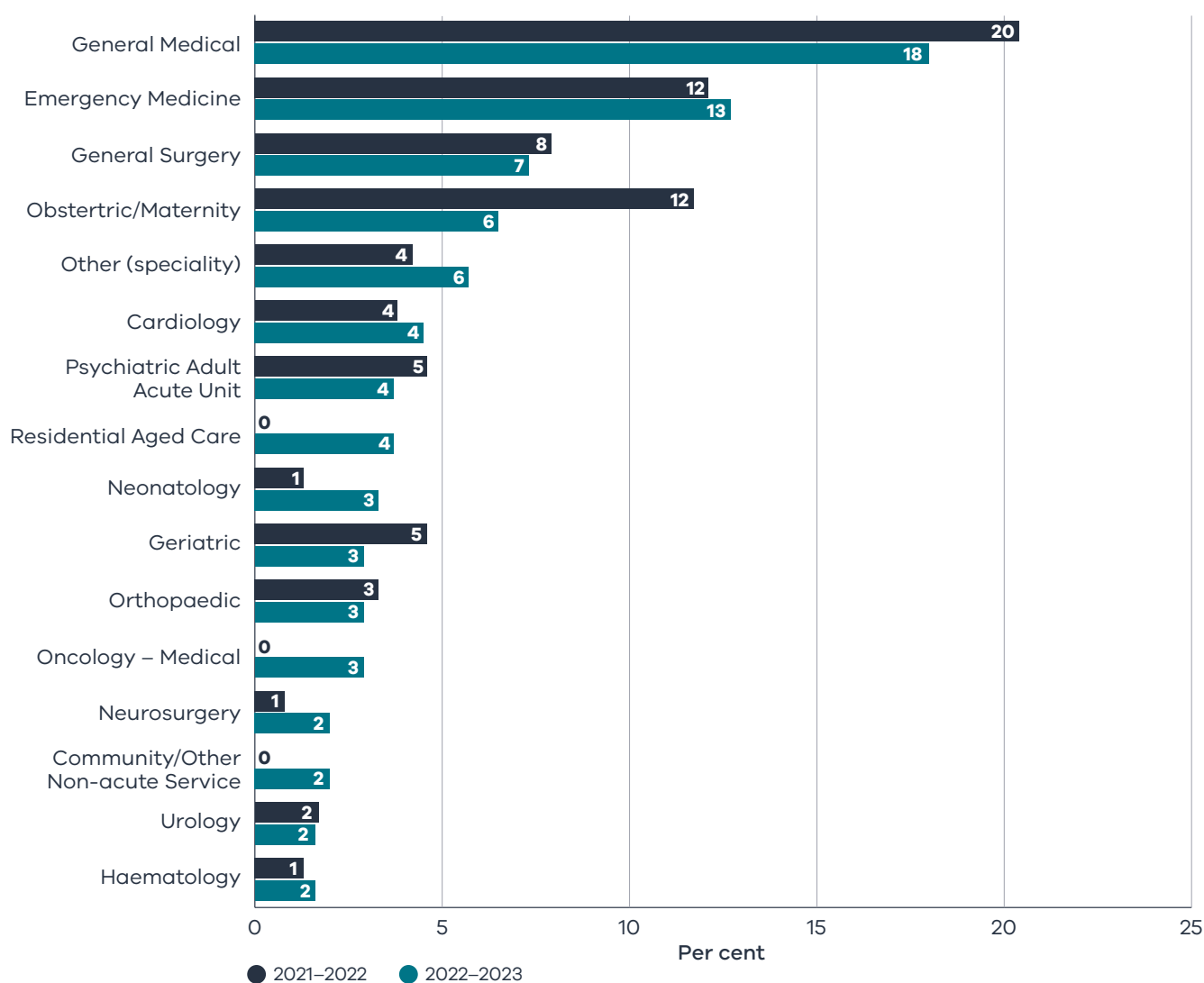


Note: Totals of figures 20 and 21 not 100% due to rounding

## Admitting speciality for patients affected by a sentinel event

Reporting health services are required to identify the speciality providing care to the patient when the sentinel event occurred.

**Figure 22. Admitting speciality for patients affected by sentinel events by percentage of events 2021–22 and 2022–23**



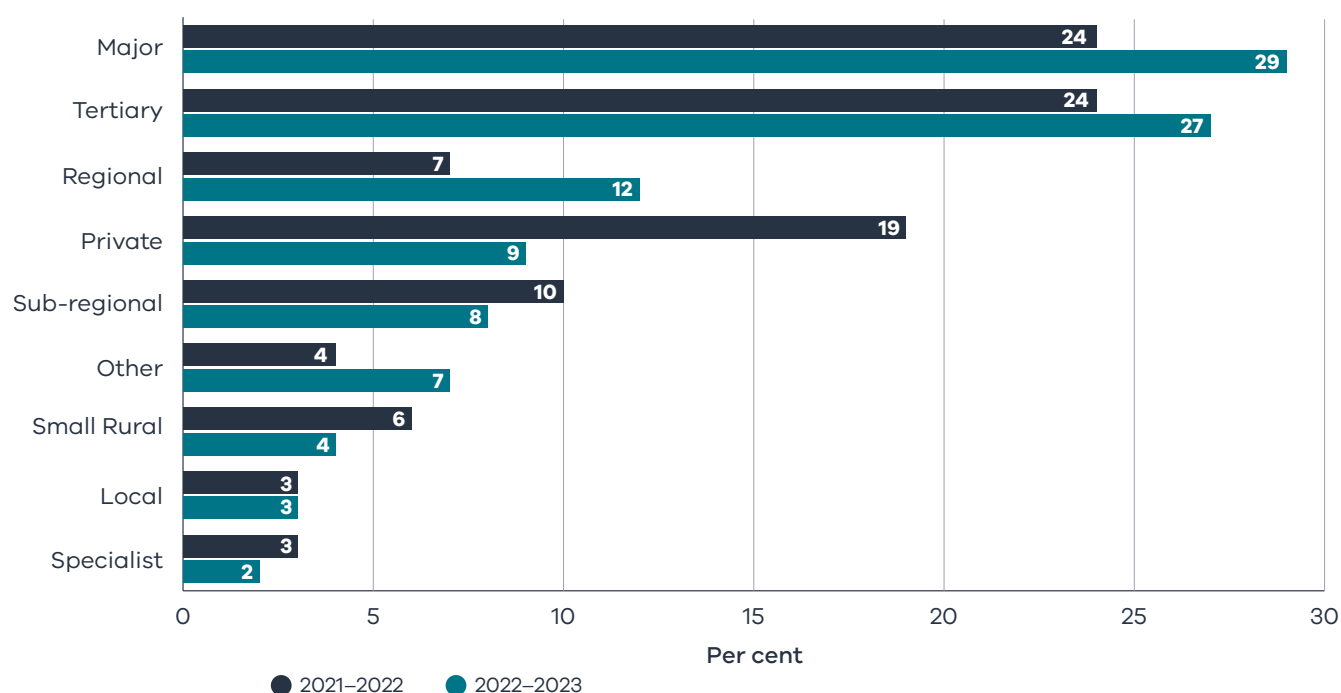
Note: This graph excludes admitting specialities with less than 2 per cent of total events in 2022–23

### Sentinel event peer group and location

The location of sentinel events occurring within health services has remained steady across two years, with wards, emergency departments, patient rooms, intensive care units and operating theatres representing a substantial number of

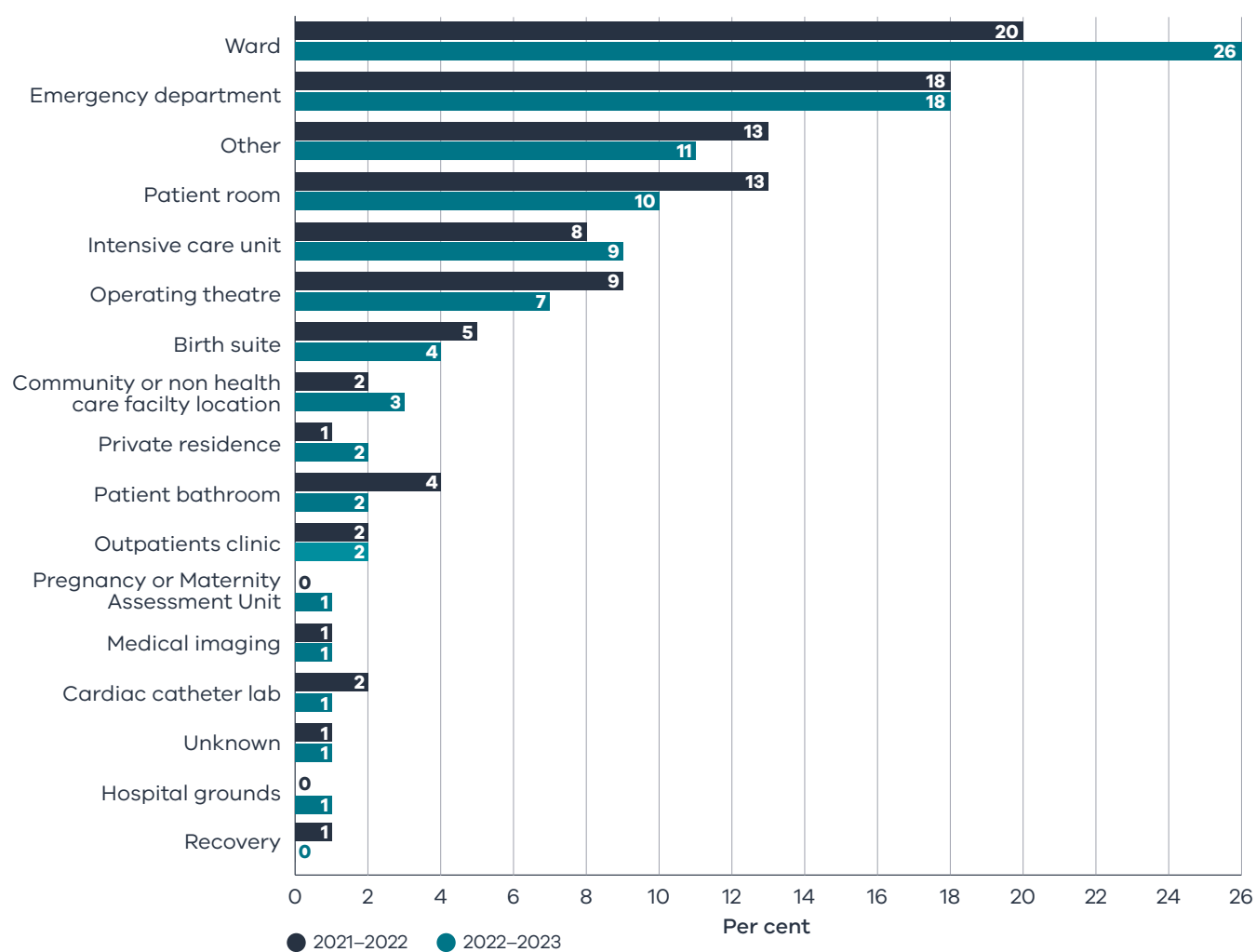
reports both years. This reflects areas where patients spend a lot of time receiving care (i.e. wards and patient rooms) or where complex, high-risk situations unfold (i.e. emergency departments, operating theatres, and intensive care units).

**Figure 23. Percentage of sentinel events by health service peer group 2021–22 and 2022–23**



Note: Totals not 100% due to rounding

**Figure 24. Percentage of sentinel events by location within health service 2021–22 and 2022–23**





## Time to notify sentinel events

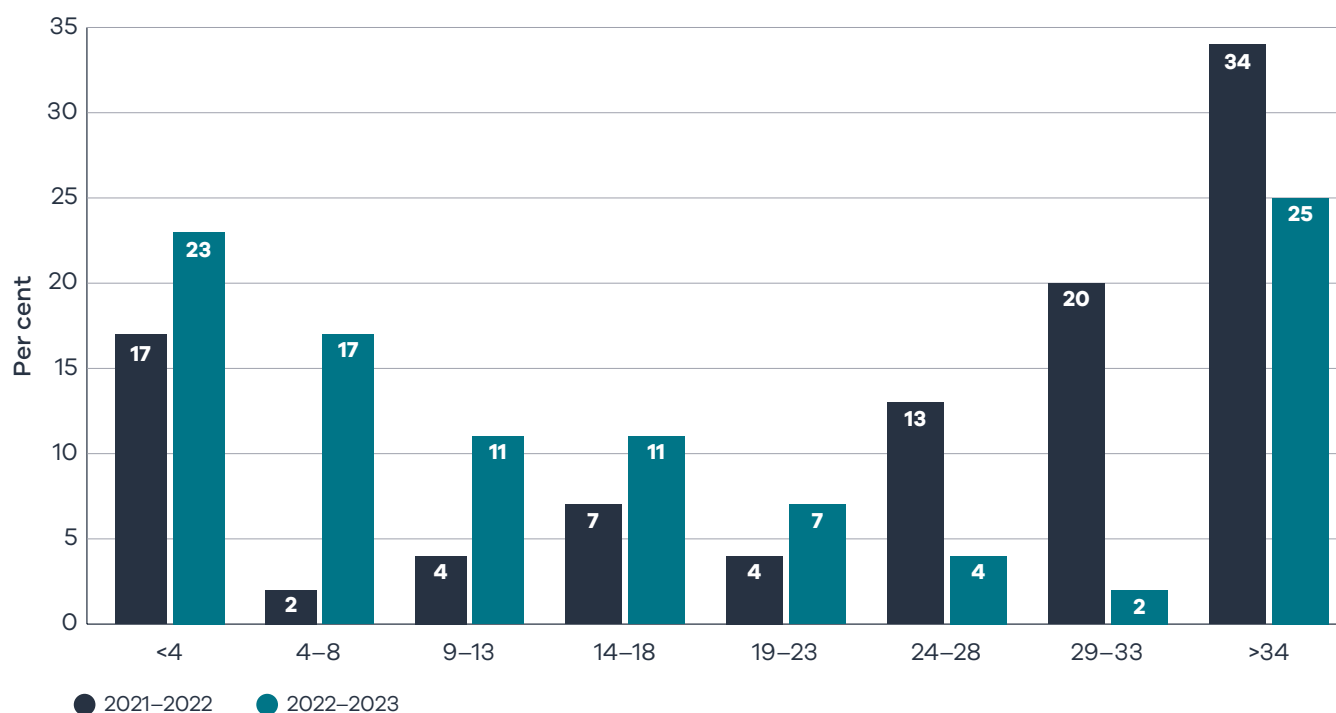
Health services are required to notify SCV of a sentinel event within three business days of becoming aware of the event.

For 2022–23:

- the average days to notify a sentinel event was 27.7 business days, up from 22.5 business days in 2021–22
- 23 per cent of sentinel events were notified within three business days, an increase from 17 per cent in 2021–22.

Services cited delays in determining the extent of harm to the patient and a delay to determining if an event met sentinel event criteria, as the most common reasons for delayed notification.

**Figure 25. Number of business days to notify sentinel events 2021–22 and 2022–23**



Note: Totals not 100% due to rounding

### Time to review sentinel events

Time to review sentinel events is a new indicator, measuring the time taken from sentinel event notification to the submission of the recommendations formed by the health service's review of the event (Part C of the sentinel event report). SCV plans to monitor this indicator to inform whether the timeframes set for health services require amendment and to identify where services may require further support.

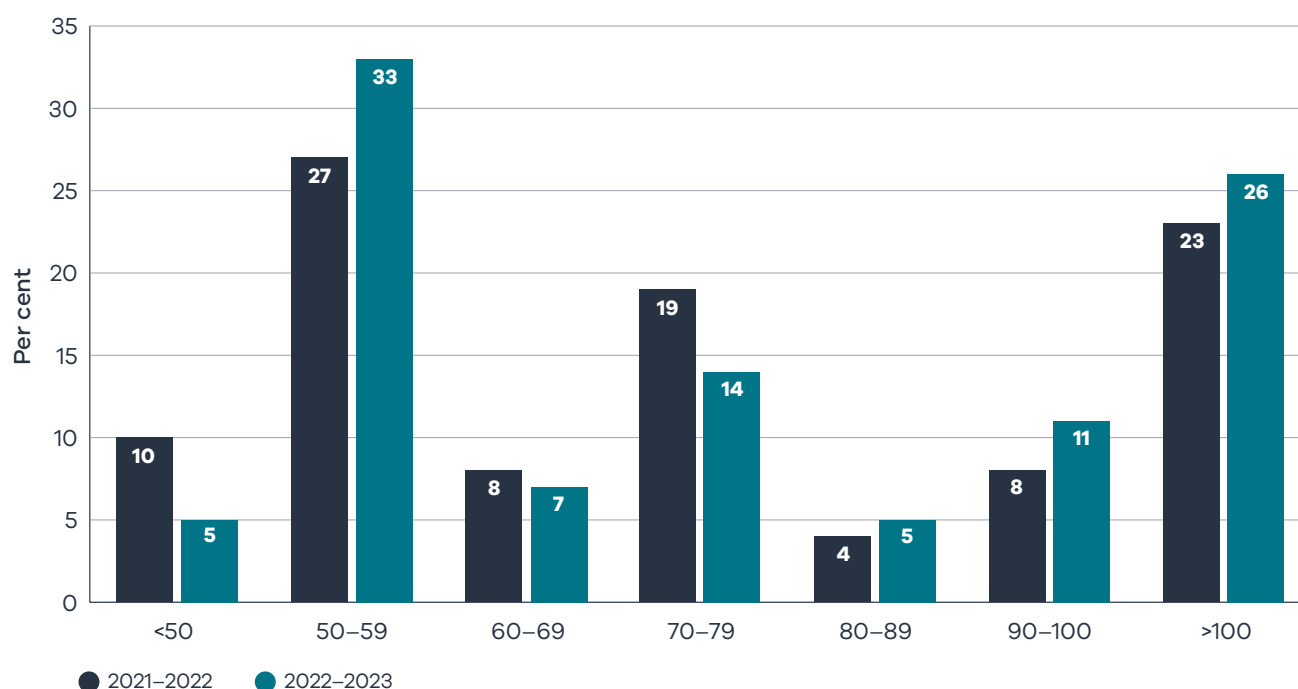
The required timeframe for sentinel event report Part C submission for a health service is:

- 50 business days for a single agency review
- 75 business days for approved multi-agency review.

Average days to complete a review for 2022–23 were:

- for a single agency review, 89 business days
- for a multi-agency review, 105 business days.



**Figure 26. Number of business days to complete a sentinel event review 2021–22 and 2022–23**




Note: Totals not 100% due to rounding

# Appendix 1: Guide to strength of recommendations

**Table 4. Strength of recommendations**

Recommendation strength	Recommendation category	Example
	<b>Strong actions</b>	Architectural/physical changes in surroundings Replace revolving doors at the main entrance into the building with powered sliding or swinging doors to reduce patient falls
	<b>Strong actions</b>	New devices with usability testing Perform pre-purchase testing of blood glucose monitors and test strips to select the most appropriate for the patient population
	<b>Strong actions</b>	Engineering control (forcing functions that force the user to complete the action) Eliminate the use of universal adapters and peripheral devices for medical equipment; use tubing/fittings that can only be connected the correct way
	<b>Strong actions</b>	Simplify process and remove unnecessary steps Remove unnecessary steps in a process; standardise the make and model of medication pumps used throughout the organisation; use barcoding for medication administration
	<b>Strong actions</b>	Tangible involvement by leadership Participate in unit patient safety evaluations and interact with staff, purchase needed equipment, ensure staffing and workload is balanced
	<b>Moderate actions</b>	Redundancy Use two registered nurses to independently calculate high-risk medication dosages
	<b>Moderate actions</b>	Increase in staffing/decrease in workload Make float staff available to assist when workloads peak during the day
	<b>Moderate actions</b>	Software enhancements or modifications Use computer alerts for drug-to-drug interactions
	<b>Moderate actions</b>	Eliminate/reduce distractions Provide quiet rooms for programming patient-controlled analgesia pumps; remove distractions for nurses when programming medication pumps
	<b>Moderate actions</b>	Education using simulation-based training with periodic refresher sessions/observations Conduct patient handover in a simulation lab environment, with after-action critiques and debriefing
	<b>Moderate actions</b>	Checklist/cognitive aids Use pre-induction and pre-incision checklists in operating rooms; use a checklist when reprocessing flexible fibre optic endoscopes
	<b>Moderate actions</b>	Eliminate look- and sound-alikes Do not store lookalikes next to one another in the medication room
	<b>Moderate actions</b>	Standardised communication tools Use read-back for all critical lab values; use read-back or repeat-back for all verbal medication orders, use a standardised patient handover format

Recommendation strength	Recommendation category	Example
	<b>Weak actions</b>	Double checks
	<b>Weak actions</b>	Warnings
	<b>Weak actions</b>	New procedure/memorandum/ policy
	<b>Weak actions</b>	Training

