Health Quality & Safety Commission
Te Tāhū Hauora

Aged residential care analysis of harm (adverse) events 1 July 2024 to 30 June 2025

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Contents

Introduction 5

- Reporting harm (adverse) events in New Zealand 5
- Background to aged residential care reporting of harm 5
- Engagement and relationships 5

Data 7

- Context 7
- Quantitative data 7
- Qualitative analysis 8
- Methodology 9
- Discussion 10

Figures

Figure 1: Ethnicity breakdown of aged residential care harm events for the year 2024/2025 8
Figure 2: The SEIPS tool 8

Tables

Table 1: Number of SAC 1 and 2 harm events by type 9
Table 2: Learning opportunities categorised using SEIPS 9
Table 3: Methodology used to review the harm event 10

Introduction

This is an analysis of a full year (1 July 2024 to 30 June 2025) of harm (adverse) event reporting by the aged residential care (ARC) sector to the Health Quality & Safety Commission Te Tāhū Hauora (the Commission). The analysis gives insight into the type of harm that ARC reports, the review process being undertaken and the system learning identified. We have reviewed a selection of anonymised review reports. Our analysis identifies that there are opportunities to support ARC in making further improvements in accordance with the national framework, the Commission's Healing, learning and improving from harm: National adverse events policy 2023 (the policy) (HQSC 2023).

Reporting harm (adverse) events in New Zealand

The policy provides a national framework for health and disability providers to use to continually improve the quality and safety of their services. It provides a consistent way to heal, learn and improve through recognising, reporting and reviewing harm (adverse) events that occur during the delivery of care, acknowledging the impact these events have on residents, whānau and health care workers.

Health and disability providers are required to report harm (adverse) events that meet the criteria of Severity Assessment Code 1 or 2 (HQSC 2023). A part A, initially notifying the Commission of the harm, needs to be submitted within 30 working days of the event being notified. A review of the harm (adverse) event using an approved review methodology then occurs. This final review report along with a part B is then submitted to the Commission within 120 working days of the event being reported to the provider.

Background to aged residential care reporting of harm

The Ngā Paerewa health and disability standard came into effect in February 2022 and enabled the Commission to engage with a wider audience of health and disability providers than previously. Aged residential care providers need to meet criteria 2.2.5, stating that they 'shall follow the National Adverse Event Reporting Policy' (see page 40 of the standard).

The Commission worked with HealthCERT at the Ministry of Health to develop and agree on a memorandum of understanding to decrease the duplicate reporting of pressure injuries. The memorandum of understanding enabled reporting of pressure injuries solely through the Commission process rather than dual reporting in accordance with section 31(5) of the Health and Disability Services (Safety) Act 2001. It was signed by the Director-General of Health in March 2024 and came into effect from 1 July 2024.

Engagement and relationships

To support the policy, the Commission produced a severity assessment code (SAC) guidance document, through a co-design approach with ARCs (HQSC 2024a). This occurred over a period of 12 months (March 2023 to April 2024). It outlines the other types of clinical harm that providers must report to the Commission.

To further socialise the policy, the Commission provided webinars, attended six in-person Aged Care Association senior leadership education opportunities around the motu and presented at the October 2024 Aged Care Association conference. The in-person engagement further strengthened the relationships that are essential to provide support and establish trust.

Data

Context

There are currently 668 certified aged residential care (ARC) facilities in New Zealand. For the financial year 2024/25, 440 ARC facilities notified the Commission of harm events that met the SAC 1 or SAC 2 criteria. The Commission commends the ARC sector for this; it shows a robust reporting culture that supports transparency within the care setting.

Quantitative data

Harm (adverse) events

For the reporting year 2024/2025, providers reported a total of 2,004 SAC 1 and 2 harm (adverse) events to the Commission. This represents a substantial amount (62%) of all SAC 1 and 2 harm event notifications to the Commission for the same time period, which totalled 3,232. Of the 2,004 harm events reported by ARCs, 90 were SAC 1 events and 1,914 were SAC 2 (HQSC 2024d).

Event types

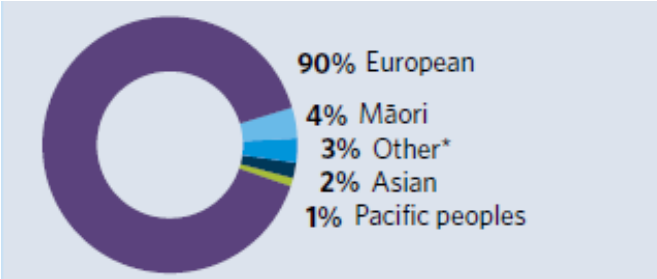
The leading type of harm reported (1,154 events) were falls that met criteria in the ARC SAC guide (HQSC 2024a). The second highest type of harm reported was pressure injury events (748 events). These reporting numbers demonstrate ARC providers' commitment to continue reporting harm – particularly pressure injuries – building on the reporting culture that was already established when ARC reported these to HealthCERT.

The third highest category reported to the Commission was behavioural harm events. Only 45 events were reported for this category. However, we anticipate this will be an area of growth; the sector will be challenged by increasingly complex psychological and neurological diseases as the aged population grows (Ervin et al 2012).

Ethnicity

Of those 2,004 who experienced harm, 90% were European (see Figure 1). This can be attributed to Europeans having a longer life expectancy than all other non-European ethnicities in Aotearoa New Zealand, due to the social determinants of health (Stephens et al 2022).

Figure 1: Ethnicity breakdown of aged residential care harm events, 2024/2025

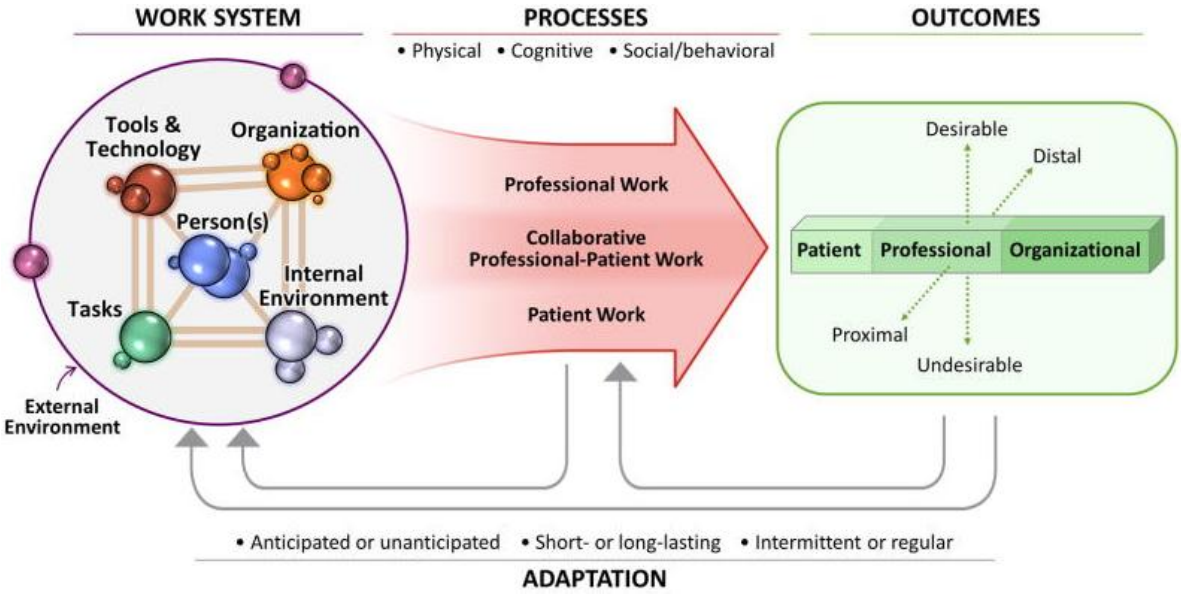


*Other = other ethnicity + Middle Eastern, Latin American and African + residual categories

Qualitative analysis

We analysed a selection of anonymised reports using the Systems Engineering Initiative for Patient Safety 2.0 (SEIPS) (Holden et al 2013). This is a validated Human Factors tool that examines the work system and how it shapes the normal every day, as Figure 2 shows. Specifically, we categorised the learning opportunities according to SEIPS to help identify the system-wide learnings emerging from the reviews. Learning opportunities (previously known as recommendations) are the system improvement areas that are identified during the harm event review process. The next step is to share these findings with the wider ARC sector to help inform sector learning. Concurrently, we also noted the methodology used in the reviews to understand how the learning review (the Commission's preferred methodology) was being utilised.

Figure 2: The SEIPS tool



Note: Reproduced with permission.

Methodology

Providers submitted 317 anonymised reports in addition to the part Bs. We selected 10% (31) of these reports for this analysis. Of these reports, 21 (6 SAC 1 and 15 SAC 2) related to a fall, 9 (all SAC 2) were pressure injuries and one met other SAC 1 criteria (see Table 1). This is reflective of the total numbers of falls and pressure injuries and other events reported to the Commission for the same reporting period.

The policy does state that, alongside the part B, providers will submit an anonymised final report highlighting the system learning opportunities and actions. While the Commission has strongly encouraged this, the culture has yet to be embedded, and most part B reports submitted do not have a corresponding anonymised final report. During the randomised selection process, we noted that in many instances either the learning opportunity boxes were not completed or the provider noted that the full report should be referred to for these, meaning that using the part Bs alone would not identify the learning opportunities. We therefore limited randomisation to the 317 events for which a full anonymised report was submitted.

Table 1: Number of SAC 1 and 2 harm events by type

Type of event	SAC 1	SAC 2	Total
Fall	6	15	21
Pressure injury		9	9
Other	1		1
			31

We reviewed the anonymised reports and extracted the learning opportunities from these. We identified 124 learning opportunities from the 31 reports we reviewed. Six of the reports stated that the review had not identified any learning opportunities.

Once extracted, we categorised the learning opportunities using the six dimensions of the work system from the SEIPS tool. The six dimensions are: person factors, technology and tools, task factors, work environment, organisation and external influences. Table 2 sets out how many learning opportunities were identified for each dimension.

Table 2: Learning opportunities categorised using SEIPS

	Person factors	Technology and tools	Task factors	Work environment	Organisation	External influence
Fall	39	5	27	3	12	
Pressure injury	14	7	13			
Other			2		2	
	53	**12**	**42**	**3**	**14**	**0**

Following categorisation, we reviewed each SEIPS dimension to consider which learning opportunities we could highlight to the sector for system-wide learning.

Concurrently, we noted what methodology the ARC provider had identified to review the harm event. Table 3 sets out these methodologies.

Table 3: Methodology used to review the harm event

Methodology	
File review	12
Learning review	7
Pressure injury template	2
Fall template	2
Ishikawa/Fishbone	1
Not stated/unclear	7
	31

The Commission teaches and recommends the application of the 'learning review' methodology by Prof Ivan Pupulidy (Pupulidy and Vesel 2017). We prefer this methodology as it takes a system-wide approach and has a focus on sustainable learning and change (HQSC 2023). While seven of the 31 reports we reviewed identified that the provider had used the learning review methodology, on closer inspection we noted that key steps of the methodology were not followed, such as the use of focus groups, gathering information from all sources or using 'network of influence' maps. By missing these key steps, providers lost the opportunity for sense-making and identifying influences, making it difficult to formulate system-level learning opportunities.

Discussion

We considered each domain of the SEIPS tools after mapping the learning opportunities. These are discussed below.

Person factors

We categorised 53 learning opportunities in the person-centred domain. This represents the highest number of learning opportunities across the six domains. In events that included a fall, 39 were person factors, while for pressure injuries there were 14. 'Person factors' describes a learning opportunity involving people, inclusive of residents, health care workers and whānau (Holden et al 2013). Summarised examples from the reports include education sessions given to new staff members; regular training for fall prevention techniques; a registered nurse being spoken to about the event and keeping family updated.

These person-factor learning opportunities were often targeted at individual health care workers or homogenised groups of health care workers (for example, health care assistants or registered nurses) rather than considering all groups involved in the harm event. Often missing were learning opportunities orientated towards a resident and/or their whānau – most were focussed on the action or inaction of health care workers. For example, health

care workers needing to be extra vigilant to the risk of an absconding resident as opposed to having the perimeter of the facility secured for the resident's safety.

Furthermore, the effectiveness of education sessions, reminders and/or training for health care workers should be reviewed in light of the Human Factors and Ergonomics-influenced Hierarchy of Intervention Effectiveness (Lan et al 2026). In this model, education and training is ranked as the lowest in the hierarchy of interventions and is considered a person-focused as opposed to a system-focused tool. Person-focused interventions limit the applicability of the learning opportunities across the ARC sector compared with system-focused learning opportunities, which can be generalised with a broader application.

It is interesting to note that of the 53 learning opportunities overall for this domain, 39 involved falls. Falls, by their nature, are spontaneous, sudden and not always foreseeable. While health care workers must take preventative action to reduce the likelihood of falls occurring, the learning opportunities are heavily skewed toward person-factor (or health care worker) behavioural changes or a perceived knowledge deficit.

Tools and technology

Twelve learning opportunities were identified involving the role of tools and technology. This domain concerns the objects that people use to do, or assist, their work (Holden et al 2013). In the ARC context, pressure-relieving mattresses, sensor mats, hip protectors and so on are widely used to prevent pressure injuries and falls. Summarised examples of the learning opportunities the reports identified include trial of an automated turning system, staff ensuring a sensor mat was in place and the use of security equipment.

The low number of learning opportunities in this domain seems to be indicative of inward-looking solutions in place of providers looking up and out to other possibilities or engaging with other system-wide learnings. Many new tools and technologies are emerging in this space: for example, wearable devices that can detect high impact sustained by the body, alerting health care workers to a fall and thermal imaging devices to detect the depth of pressure injuries, particularly for people with darker skin tones. None of the reports we analysed pointed towards exploration of new technologies or tools.

On the other hand, the reports appropriately identified a need not only to utilise the tools and technology that are already available in the facilities but also to utilise them at an earlier stage, where possible. For example, some reviews identified that earlier use of a pressure-relieving mattress may have prevented deterioration of a stage 1 pressure injury to a stage 3 injury. Of course, the key is to first identify the presence of the stage 1 pressure injury so an intervention can occur.

System-learning opportunities were missed at the facility level in this domain too. Providers could be doing more to review their tools and technology to ensure that they are still meeting current needs: for example, consideration of whether the brakes on a low-frame walker are working and whether it is at the appropriate height for a particular resident. This also acts as a demonstration of interconnections between the person-factor domain and the tools-and-technology domain.

Task factors

We identified 42 learning opportunities as belonging to the task-factors domain. Task factors are attributes like the difficulty, complexity and sequence of the specific actions health care workers carry out in their work (Holden et al 2013). This was the second largest populated domain, with a proportionate spread across falls, pressure injuries and other events. Summarised examples of learning opportunities in this domain included earlier review of polypharmacy interactions, regular audits to track fall rates, earlier attendance to incontinence, intentional rounding and encouragement of mobility.

The learning opportunities in this domain were focused on the health care worker 'doing more of' a task or 'ensuring' a task was done. Often, reviews did not consider why the task was not done, how the task was going to be performed in the context of all the other tasks that need to be completed or how the task would be done at an increased frequency. More system-focused learning opportunities need to be considered in this domain, but these need to be grounded in 'work-as-done' as opposed to 'work-as-imagined' (Hollnagel 2017). Of note, providers did not comment in this context that further resourcing was required to achieve task completion or increased frequency. One provider stated that, as their staffing levels did not allow for increased supervision of the resident, a particular event had been unavoidable, and therefore no learning opportunities were present.

Work environment

We identified three learning opportunities as belonging to the work environment domain. In this context, the work environment means the physical environment, inclusive of lighting, noise, temperature, layout, space, vibrations, etc (Holden et al 2013). Unsurprisingly, these opportunities came from the reports where a fall was the harm experienced, where providers recognised the design and layout of the environment as a key contributing factor. Examples from reports that identified learning opportunities related to the work environment included a rubbish bin having been left in the bedroom and a toilet at reception that should have been disestablished as it was too small for residents to use with mobility aids.

Given the amount of SAC 1 and 2 falls providers reported to the Commission for the reporting year, we had anticipated a higher number of learning opportunities related to the work environment. We note that it is important that residents of ARC facilities view facilities as their home, and that, accordingly, providers aim to maximise their sense of autonomy; this therefore does limit the extent to which providers can alter or control the physical environment. Even so, it is important for providers to consider shared (communal) and identified high-risk spaces, such as bathroom or toilet facilities, from the viewpoint of safety and the need to prevent falls.

Organisation

We identified 14 learning opportunities as belonging to the organisation domain. This domain concerns structures that are put in place or inform the work being undertaken within a particular facility (Holden et al 2013). This could include rosters, daily schedules, staffing levels, policies and procedures and organisational culture. Examples of learning opportunities identified in the reports included review of a falls management policy by physiotherapist,

guidelines for post-fall management, a review of policy and a reminder to staff to read the pressure injury policy.

In this context, providers emphasised the need to update or add to policies, procedures and guidelines. We note that this is not the only solution. Furthermore, providers should note the effectiveness of reviewing or modifying a policy in light of a harm event. Again, the Hierarchy of Intervention Effectiveness highlights that ‘rules and policies’ are less effective along with people-focused interventions as opposed to a more effective system-focused intervention (Lan et al 2026). We recommend that providers within the ARC sector look more broadly into work patterns, rostering schedules and organisational culture to understand what the correlation is between these and harm events.

External influence

No learning opportunities were identified within the external influence domain. This domain relates to the influence of national and international policy, government decisions, laws, regulation and professional bodies (Holden et al 2013). At times, the relationship between external influences and a particular harm event can seem remote or, if it has been identified, insurmountable. However, these external influences do have a bearing on care delivery and represent an opportunity for escalation of concerns.

Interconnections between the domains

A key element of SEIPS is identifying interconnections across the domains, as Figure 1 above demonstrates. The domains interact with each other. By focusing on the interactions, an understanding about what is shaping the process or situation emerges (Holden et al 2013). There is fluidity involved in categorising aspects into particular domains because of these interconnections. While this review did not identify specific interconnections, as the reports we reviewed did not find them, we acknowledge that they are an important aspect when using the SEIPS tool.

Next steps

The Commission can support providers within the ARC sector to improve the quality and safety of services and meet the purpose of the policy (HQSC 2023) in the following ways.

- Continue to build on the established robust reporting culture that is already present among ARC providers. While the Commission has received an encouraging number of part A reports, it is equally important that providers review the reported harm evidenced by the submission of a part B report, including the upload of the anonymised report into the submission portal. The Commission is considering mandatory submission of review reports in the future so it can continue to build a rich database to support future qualitative analysis.
- The Commission actively supports ARC providers in recognising and reporting clinical harm events beyond falls and pressure injuries, as outlined in the SAC guide for ARC (HQSC 2024a).
- The Commission actively supports ARC providers in using the learning review methodology for SAC 1 and 2 harm events. This methodology is designed to review harm events from a system-level perspective and will assist in identifying learning opportunities at that level (rather than people-focused interventions). This includes promoting awareness of the templates on the Commission's website for falls and pressure injuries (HQSC 2024b, 2024c). The Commission designed those templates in line with the learning review principles and the policy. They are also informed by the SEIPS tool, which was applied in this analysis.
- The Commission will share this analysis and learnings with the ARC sector at the ARC Quality Leaders forum.

Conclusion

This report provides an analysis of ARC providers' first year of reporting harm events to the Commission. ARC providers were familiar with reporting pressure injuries to HealthCERT before this; that familiarity is demonstrated by the high number of reports the Commission received. The Commission encourages the ARC sector to widen its perspective on harm, to give transparency to harm events beyond pressure injuries and falls (for example, medication administration, transitions of care). This report has identified that there is scope for improvement in developing learning opportunities from reviews that focus on system learning rather than person-focused improvement.

Such a change in focus will bring about sustainable and systemic change that will further enhance the quality and safety of care our older population receives and support the committed health workforce who care for them.

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