

Indicator 3: Use of physical restraint

Objective

To monitor the proportion of use of physical restraints and trends.

Recommended reference ranges

Physical restraint per 1,000 occupied bed days

Measure	Lower target rate	Upper limit rate
Intent to restrain	0	0
Physical restraint devices	0	0

Why monitoring physical restraint is important

Restraint is any aversive practice, device or action that interferes with a resident's ability to make a decision or which restricts their free movement.

Evidence suggests that the prevalence of physical restraint in residential aged care is between 12–49 per cent (Alzheimer's Australia 2014).

This is despite research that indicates physical restraint can cause negative physical and psychological outcomes (Engberg, Castle and McCaffrey 2008).

There are a number of adverse clinical events associated with physical restraint, including:

- death
- mental health decline, with decreased cognitive function and depression
- increased social isolation
- pressure injury development

- incontinence
- falls
- confusion
- aggression
- decreased mobility
- infection
- under-nutrition
- decreased muscle strength
- pain.

Key facts

Physical restraint is an act of removing an individual's rights to freedom and autonomy.

A family member and legal representatives do not have the legal right to request that a resident be restrained.

Decisions to use or not use physical restraints may raise ethical questions and dilemmas for care workers.

The evidence indicates restraint does not prevent falls or fall-related injuries and is likely to exacerbate behaviours.

A restraint free environment is the recommended standard of care.

How to collect and report this indicator

Data collection

- There are two measures to be collected for physical restraint during each of the observation audits.
- Identify three audit days in the quarter. On each of these audit days, conduct three audits of all residents, one during the morning, one in the afternoon and one at night. This is a total of nine observation audits over the quarter.
- Observation audits should be unannounced.

Measure 1: Intent to restrain

- Is defined as the intentional restriction of a resident's voluntary movement or behaviour by the use of a device, or removal of mobility aids, or physical force for behavioural purposes.
- This measure requires observation and recording any instance where any restraint equipment or action is in place to **intentionally** restrain a resident using devices or actions contained in the definitions A, B or C.

Counting rule

- Example 1: If at the time of the audit it is observed that bedrails (definition A) **are in use** to intentionally restrict a resident from getting out of bed, then the count would be '1'. If the resident was also restrained with a safety vest (definition B) at the same time, then the count would be '2'.
- Example 2: If a resident is being intentionally restrained in a deep chair (definition A) and with a lap rug with ties (definition C), this should be counted as 2.
- Example 3: If a resident was intentionally locked in their room (definition C), then this action would be counted as '1'. If the resident was also sitting within the room with a locked table (definition B) in place then the count would be '2'.

Comments

To include on the data recording sheet for measure 1:

- Record the total number of actual residents who were being intentionally restrained at any time during the audits.
- Record the number of restraints used that are specifically requested by the resident and/or their family or advocate.

Measure 2: Physical restraint devices

- This measure is about counting **all devices** in use at the time of the audits for any reason in accordance with definition B. These are to be counted whether they are being used to intentionally restrain a resident or not.

Counting rule

- Example 1: If at the time of an audit it is observed that bedrails are in use without the intention to restrain (e.g. at resident request) this should be counted as '1'.
- Example 2: If during an audit it is observed that bedrails are intentionally in use to restrict a resident from getting out of bed, this should be counted again for measure 2 as '1', even though it has already been counted under measure 1.

Comments

To include on the data recording sheet for measure 2:

- Record the number of uses of restraint that were specifically requested by the resident and/or their family or advocate.

Definition of key data elements

A: Intent to restrain

Physical restraint is defined as the 'intentional restriction of a resident's voluntary movement or behaviour by the use of a device, or removal of mobility aids, or physical force for behavioural purposes is physical restraint.

'Physical restraint devices include **but are not limited to** lap belts, table-tops, posey restraints or similar products, bed rails and chairs that are difficult to get out of, such as beanbags, water chairs and deep chairs.'

Source: Department of Health and Ageing 2012, *Decision making tool: responding to issues of restraint in aged care*, Commonwealth Government of Australia, Canberra.

B: Physical restraint devices

Devices commonly associated with physical restraint

- Bedrails
- Chairs with locked tables
- Seatbelts other than those used during active transport
- Safety vest
- Shackles
- Manacles

C: Other restraints

Definitions A or B do not list all possible physical restraints. The audit process should consider whether **placement of furniture, use of concave mattresses, lap rugs with ties or any other devices used with the intention to restrict free movement**. If so, these should be included in measure 1.

Actions such as intentionally locking residents in their rooms should also be included in measure 1.

Exclusions

- Secure areas and perimeter alarms **are not** included for the purpose of this indicator.

Inclusions

- Make sure you include respite residents in the observational audits.

Considerations for undertaking unannounced audits

- Do not disclose the timing of the observational audit to staff, except for the person conducting the observation.
- Audits should be performed by staff who are not involved in direct care of residents on that day.
- The person conducting the audit should directly observe all residents at the allocated time. The person should walk through the facility and record any uses of restraint.
- In larger organisations, observations can be made by managers as they perform routine visits, or by quality staff during the day and by supervisors at night.
- In some smaller facilities, the only staff present onsite at night are direct care staff. Telling a staff member to conduct an audit related to restraint may result in altered practice and therefore influence the count. An alternative may be for managers to contact night staff at a certain time (previously undisclosed) and ask staff to conduct the audit at that time. This approach may reduce the possibility of altered work practices.
- Staff who conduct the audit should have a good understanding of the definition of restraint.
- If a resident is restrained by more than one type of restraint, count each restraint. This applies to measure 1 and measure 2.

Quick tips for data accuracy

- Information for this indicator is collected through actual observation and not a documentation audit.
- Ensure indicator information is collected consistently. For example, two people independently observing and interpreting the use of physical restraint must both report it in the same way.
- Ensure data collection is accurate so that you can more reliably benchmark your own internal performance and your performance against other PSRACS.

Important note

Any use of physical restraint should be investigated at the time of the audit.

- Check the appropriateness of any restraint authorisation documentation for individual residents, where it is in use.
- Restraint should only be used as a last resort, with regular processes in place for checking and reviewing ongoing need.

In exceptional circumstances where restraint is being considered or used it is very important to remember the following:

- Physical restraint is an act of removing a resident's rights to freedom and autonomy.
- Even if physical restraint is used as a temporary method of maintaining resident safety during a procedure, it must still be regarded as restraint.
- The reason for using physical restraint must be thoroughly weighed against the negative consequences of restraint.

Frequently asked questions about physical restraint

If a physical restraint that stops a resident's freedom of movement is being used to prevent a resident falling, or some other hazardous situation, should this be counted for this indicator?

Yes. *If the device or action restricts a resident's freedom of movement it counts as restraint.*

If there are questions about a resident's capacity for voluntary movement or behaviour, due to cognitive issues, should their physical restraint still be counted in this audit?

Yes.

If an item that is normally classified as a 'restraint' is being used at the request of the resident or family/advocate, should this be counted as restraint in this audit?

Yes. *If the item meets definition A – intent to restrain, it is to be counted in measure 1. If the item is listed in definition B – physical restraint device, it is to be counted in measure 2.*

Do all concave mattresses and water chairs count as restraint?

Yes. *If the use of concave mattresses and water chairs meets definition A – Intent to restrain, and restrict a resident's freedom of movement.*

No. *If the concave mattresses and water chairs do not restrict a resident's freedom of movement in any way.*

No. *If the resident is unable to independently move themselves in any way.*

This also applies to other items such as recliner chairs, deep chairs, bean bags etc.

If seatbelts are being used while people are being showered in shower chairs, do these count as restraint?

Yes. *If the use of the seatbelt meets definition A to intentionally restrict a resident's voluntary movement or behaviour, and the resident is not being actively transported, it is to be counted in measure 1.*

Yes. *If the seatbelt is in use (and does not meet definition A - intent to restrain) and the resident is not being actively transported, it is to be counted in measure 2.*

No. *If the seatbelt is in use while the resident is being actively transported by a staff member to the shower (or toilet for example).*

Is moving a resident's bed against a wall restraint?

Yes. *If by putting the bed against the wall meets definition A – Intent to restrain, and restricts a resident's freedom of movement.*

No. *If by putting the bed against the wall it does not restrict a resident's freedom of movement in any way.*

No. *If the resident is unable to independently move themselves in any way.*

Data recording sheet

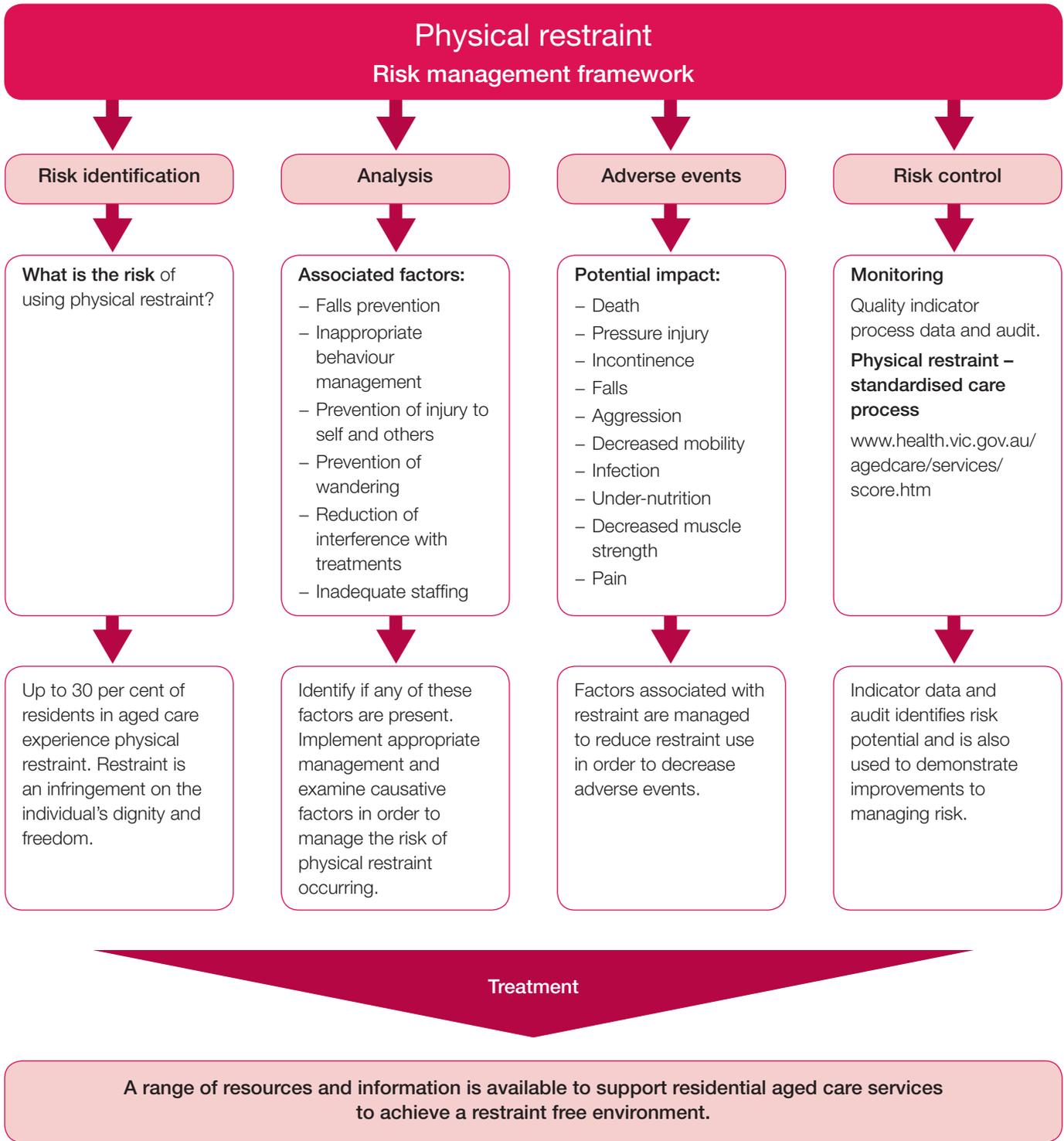
Name of service:	
Reporting quarter end date:	
Dates of report days:	1. 2. 3.

Measure 1: Intention to restrain

	Observation day 1	Observation day 2	Observation day 3	Total
Total number of uses of intentional physical restraint as per definition A from three observation audits on each observation day				
Comments Required if applicable – indicate the total number of residents who were intentionally restrained during any of the audits. Required if applicable – number of uses of restraint in the total that were requested by the resident or the resident’s family or advocate, for example ‘12 restraint uses from total were water chair requested by family’. Optional – any other comments.				

Measure 2: Physical restraint devices

	Observation day 1	Observation day 2	Observation day 3	Total
Total number of uses of physical restraint devices as per definition B from three observation audits on each observation day				
Comments Required if applicable – number of uses of restraint in the total that were requested by the resident or the resident’s family/advocate, for example ‘three restraint uses were bedrail requested by resident for security’. Optional – any other comments.				



Resources

A range of resources and information is available to support residential aged care services to achieve a restraint free environment.

- Department of Health and Ageing 2012, *Decision-making tool: supporting a restraint-free environment in residential aged care*, Commonwealth Government of Australia, Canberra:
www.health.gov.au/internet/main/publishing.nsf/Content/ageing-decision-restraint-residential.htm
- Department of Health 2014, *Standardised care process (SCP): physical restraint*, State Government of Victoria, Melbourne:
www.health.vic.gov.au/agedcare/downloads/score/restraint_scp.pdf
- NSW Department of Health 2006, *Guidelines for working with people with challenging behaviours in residential aged care facilities – using appropriate interventions and minimising restraint*, State Government of New South Wales, North Sydney:
www.health.nsw.gov.au/policies/gl/2006/pdf/GL2006_014.pdf

Evidence to support this quality indicator

This indicator highlights the use of restraint as a major issue for older people.

There is substantial evidence and research that demonstrates the use of physical restraint as having significant impacts for older people living in residential aged care.

Defining physical restraint

The Department of Health and Ageing 2012 *Decision-making tool: supporting a restraint-free environment in residential aged care* defines physical restraint in the following way:

'Restraint is any practice, device or action that interferes with a resident's ability to make a decision or which restricts their free movement' (p. 24).

This definition of physical restraint is also supported by authors such as the Australian and New Zealand Society for Geriatric Medicine (2012) and Timmins (2008).

The following devices and equipment are considered to be physical restraint when **intentionally** used to **restrict** resident **movement**:

- bedrails/cot sides
- shackles
- manacles
- over-bed tray-tables
- tray-tables that 'lock' into chairs
- deep chairs such as 'princess chairs', or other chairs that are difficult to get out of such as recliner chairs
- posey belts
- lap belts and seatbelts other than those in a motor vehicle
- safety vests
- concave mattresses.

The significance of physical restraint in residential aged care

The incidence of physical restraint in aged care across Australia is poorly documented. However, available evidence suggests an incidence of 15–30 per cent (Johnson et al. 2009).

Evidence suggests that the prevalence of physical restraint use in residential aged care is between 12–49 per cent (Alzheimer's Australia 2014).

Rationale for the use of restraint is often embedded in the perception that it reduces risks to resident safety (and the safety of others) as a result of falls, wandering, aggression, agitation and unpredictable behaviour.

There is also evidence that suggests older people living in residential aged care are physically restrained due to inadequate staff supervision.

Research indicates that the use of physical restraint can cause negative physical and psychological outcomes (Engberg et al. 2008). There may also be an inaccurate perception that using physical restraint to minimise risks to the resident's safety does not constitute restraint. Regardless of the rationale for its use, any method of physical restraint should always be regarded as such (Department of Health and Ageing 2012).

It is likely that the variations in the incidence of physical restraint cited above are due to organisations' different understandings of what actually constitutes restraint. This is supported by Meyer et al. (2008) and Fogel et al. (2009).

Regardless of the incidence of physical restraint, it is a significant issue in aged care because it is an infringement of the individual's right to freedom and dignity (Gelkopf et al. 2009; Meyer et al. 2008; Royal College of Nursing 2008; Timmins 2008). This is in direct opposition to the objectives of the Commonwealth *Charter of care recipients' rights and responsibilities: residential care* (Department of Social Services 2014).

Evidence also shows restraint may actually cause or exacerbate the adverse outcomes its use was attempting to address (Engberg et al. 2008). For example, physical restraint used to restrict unsafe movement of a resident who has delirium and is aggressive exacerbates their delirium and aggression (Australian and New Zealand Society for Geriatric Medicine 2012).

This example highlights the importance of understanding:

- what physical restraint is
- its appropriateness in residential aged care
- the negative outcomes associated with it.

Adverse clinical events and the use of physical restraint

Decisions to use or not use physical restraint may raise ethical questions and dilemmas for care workers. These challenges can be difficult and may not be easily resolved.

When deciding whether or not to use of physical restraint, it may be difficult to avoid harm, as injury can be caused by either course of action.

Healthcare workers have an obligation to all those in their care, and if enabling one person's freedom results in harm to others, then decision makers need to justify their decision based on the consequence of applying or not applying restraint (Royal College of Nursing 2008).

There is substantial evidence that shows the negative consequences associated with physical restraint and the older person. No evidence exists to support the view that the use of physical restraint maintains safety and reduces the incidence of adverse clinical events such as falls.

However, the literature acknowledges that in some situations the use of physical restraint may be the only last option available to manage a specific issue.

The psychological and physical adverse outcomes for residents caused by physical restraint can be serious. Research indicates that physical restraint clearly impacts on a resident's mental health, including their emotional wellness and social engagement.

Castle (2006) demonstrates that residents who are restrained are more likely to become more impaired with respect to cognitive performance, depression and social engagement. They conclude that if facilities reduce the use of physical restraint, the prevalence of residents' mental health problems is also likely to decline.

Other adverse events associated with physical restraint and the older person examined by several studies include damage to the individual's dignity and autonomy as a result of being physically restrained.

The Australian and New Zealand Society for Geriatric Medicine (2012) cites emotional desolation, withdrawal, fear and anger as consequences of physical restraint.

Gastmans and Milisen (2005) add that an older person who is physically restrained may experience loss of dignity, social isolation, loss of self-respect and identity, and feelings of shame. These points are also supported by authors such as Timmins (2008) and Stubbs et al. (2009).

Mortality associated with or caused by physical restraint is cited frequently in available evidence (Australian and New Zealand Society for Geriatric Medicine 2012; Agens 2010; Lane and Harrington 2011; McCabe et al. 2011).

A residential aged care coronial communiqué released by the Victorian Institute of Forensic Medicine in 2006 cites 21 deaths of older people in health and aged care settings linked to physical restraint. Four of those deaths occurred as a direct result of physical restraint causing asphyxia (choking).

Gastmans and Milisen (2005) state that physical restraint is associated with an increased risk of mortality related either directly to the restraint device or associated with the restraint device. For example a resident may be restrained to reduce the risk of falling, but may in fact experience a fall as a result of being restrained, which then results in a head injury and ultimately death.

There are a number of other adverse clinical events aside from mortality associated with restraint cited in the available evidence:

Adversity in the use of physical restraint

- Infringement of residents' human rights and dignity
- Pressure injury development
- Incontinence
- Decreased muscle strength
- Falls
- Confusion
- Aggression
- Anxiety
- Bruising
- Abrasions
- Nerve injury
- Decreased mobility
- Nosocomial infection
- Chest and abdomen compression
- Physical dependence
- Under-nutrition
- Pain

Physical restraint

Adapted from Feng et al. 2009, Gelkopf et al.2009, Pellfolk et al.2010, Knox 2007, Meyer et al. 2008, Fogel et al. 2009, Timmins 2008, Agens 2010, Lane and Harrington 2011, Evans et al. 2003, and Gastmans and Milisen 2005.

Why physical restraint occurs

There are many reasons why physical restraint is used in the aged care environment. However, there is no evidence that demonstrates physical restraint is of any benefit to aged care residents.

Available evidence does suggest there may be situations where physical restraint is sometimes required because all other options used to manage resident safety have failed.

The general consensus of the literature evaluated concludes there are six common reasons why physical restraint is rationalised for use among older people (Agens 2010; Australian and New Zealand Society for Geriatric Medicine 2012; Evans et al. 2003; Gelkopf et al. 2009; Huang et al. 2009; Knox 2007; Lane and Harrington 2011; McCabe et al, 2011; Meyer et al, 2008; Pellfolk et al. 2010; Saarnio & Isola 2009; Timmins, 2008).

These are:

- prevention of falls
- management of aggressive/inappropriate behaviour
- prevention of injury to the confused resident
- prevention of wandering
- reducing interference with 'treatments' and medical devices
- risk reduction during periods of low/inadequate staff supervision.

When measured against the adverse outcomes of the use of restraint outlined on p. 1, it is clear that these rationales are contradictory. In addition, the Australian and New Zealand Society for Geriatric Medicine (2012) clearly states the use of physical restraint should never be used to compensate for inadequate staffing numbers.

Wang and Moyle (2005) also point out physical restraint is often perceived as a preventive strategy to reduce risks to residents. This issue is also supported by authors such as Johnson et al. (2009) and the Victorian Institute of Forensic Medicine (2006).

The use of physical restraint has also been linked to nursing and care worker knowledge, education and understanding of what constitutes restraint and the appropriateness of its application in the aged care setting. This is a skill set that has been demonstrated as inadequate in international studies (Huang et al. 2009).

This issue is highlighted by Johnson et al. (2009), who examine a restraint minimisation program in an Australian residential aged care service. Nursing staff consistently demonstrated a belief that the benefits of physical restraint far outweighed the negatives associated with it.

Saarnio and Isola (2009) state that nursing staff may not be fully aware of alternative options, making it difficult for them to make an informed decision about its use. This is a significant issue considering nursing staff in residential aged care are often the key decision makers regarding the use of physical restraint (Gelkopf et al. 2009; Huang et al. 2009).

Another issue is the request for the use of physical restraint by the resident or resident's family. The Commonwealth Department of Health and Ageing has made a clear statement about requests for restraint by family members:

'A family member or legal representative does not have the legal power to require that a resident be restrained. This is a clinical decision that must be made by appropriately qualified people.

The reasons for the decision to restrain and the process by which the decision was reached should be documented, as those making the decision are legally accountable for the decisions and consequences'

Source: *Decision-making tool: supporting a restraint free environment in residential aged care*, p. 22.

Several studies discuss resident perceptions of being physically restrained at their own request. Residents request the use of restraint because they believe it makes them feel 'safe' (Gastmans & Milisen 2006), it can stop them from falling (Gallinagh et al. 2001), and they trust that nursing and care staff are making the right decision to restrain them (National Ageing Research Institute 2005).

Physical restraint is often used to manage behavioural and psychological symptoms of dementia and prevent falls.

However the evidence indicates restraint does not prevent falls or fall-related injuries (Quershi 2009) and, indeed, is likely to exacerbate behaviours.

A restraint-free care environment is the recommended standard of care (Rathnayake 2012).

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