

Falls and Long- Term Care

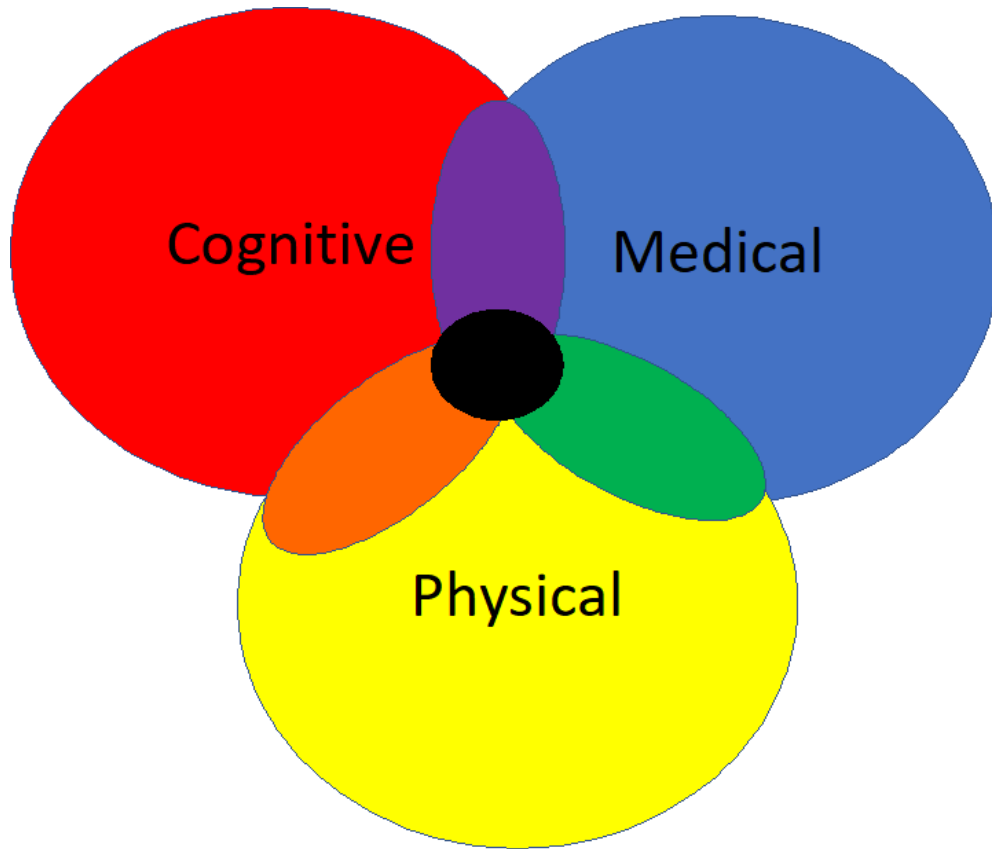


What
Guides
us at
E.C.C.C

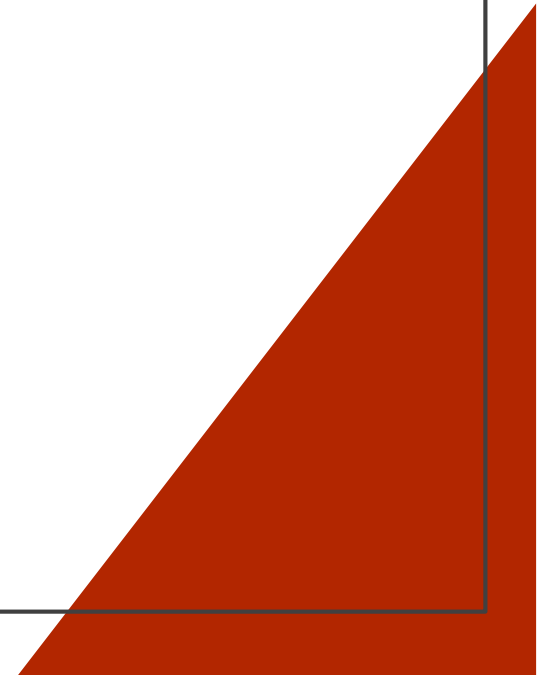
- Resident centered care
- Resident comfort and quality of life

What is a Fall?

- Any sudden unintentional change in position
(according to R.A.I.-M.D.S.)
- Slips, trips, and slides



Causes of Falls



Research from Community

- According to 2016 research study 52% of young adults have a fall (ages 18 to 35)

Heijnen, M. J., & Rietdyk, S. (2016). Falls in young adults: Perceived causes and environmental factors assessed with a daily online survey. *Human Movement Science, 46*, 86–95. <https://doi.org/10.1016/j.humov.2015.12.007>

Research from Community

- From a 2017 study

Age Cohort	Fall Injuries
18-44	22%
44-65	30%
65+	48%

Table 1 indoor fall related injuries in males in US sample population

Timsina, L. R., Willetts, J. L., Brennan, M. J., Marucci-Wellman, H., Lombardi, D. A., Courtney, T. K., & Verma, S. K. (2017). Circumstances of fall-related injuries by age and gender among community-dwelling adults in the United States. *PLoS one*, 12(5), e0176561.

<https://doi.org/10.1371/journal.pone.0176561>

Risk of injury from falls in LTC

- The Centre for Disease Control (C.D.C.) reports 20-30% of seniors in LTC will have a significant injury from falls
- Main injuries
 - Fracture
 - Hip is very common
 - Bruises
 - Head injury

Centers for Disease Control and Prevention. (2017, February 10). *Important facts about falls*. Centers for Disease Control and Prevention.
<https://www.cdc.gov/homeandrecreationalafety/falls/adultfalls.html>.

Stats from E.C.C.C.

April 2021

FLOOR	TOTAL NO. OF FALLS	NO. OF RESIDENTS WHO FELL	DAY SHIFT (0700-1500)	EVENING (1500-2300)	NIGHT (2300-0700)	NO INJURY	MINOR INJURY	MODERATE INJURY	SEVERE INJURY	SENT TO HOSPITAL DUE TO FALL
2 nd	22	8	4	13	5	17	3	2	0	0
3 rd	12	6	1	4	7	12	0	0	0	0
Total	34	14	5	17	12	29	3	2	0	0

May 2021

FLOOR	TOTAL NO. OF FALLS	NO. OF RESIDENTS WHO FELL	DAY SHIFT (0700-1500)	EVENING (1500-2300)	NIGHT (2300-0700)	NO INJURY	MINOR INJURY	MODERATE INJURY	SEVERE INJURY	SENT TO HOSPITAL DUE TO FALL
2 nd	9	5	3	5	1	9	0	0	0	0
3 rd	7	5	3	0	4	6	1	0	0	0
Total	16	10	6	5	5	15	1	0	0	0

JUNE 2021

FLOOR	TOTAL NO. OF FALLS	NO. OF RESIDENTS WHO FELL	DAY SHIFT (0700-1500)	EVENING (1500-2300)	NIGHT (2300-0700)	NO INJURY	MINOR INJURY	MODERATE INJURY	SEVERE INJURY	SENT TO HOSPITAL DUE TO FALL
2 nd	14	7	4	6	4	14	0	0	0	0
3 rd	15	4	6	5	4	15	0	0	0	0
Total	29	11	10	11	8	29	0	0	0	0

Stats from AHS for LTC

Fall	Fall rate in Alberta is 15.8
Hip	Hip fracture rate in Alberta from falls is 3%
Break	Other break rate in Alberta from falls is 2%

A case study

The resident was falling repeatedly before admission and within the first week of admission on the way to the bathroom

The resident has bladder and bowel urgency due to medical diagnoses

The resident is physical weaker due to lack of activity during Covid 19

The resident is very cognitively aware but is refusing therapy and is not walking to meals despite being able

Fall protection at E.C.C.C.

Exercise programs

Assistive and protective
devices

Environmental modification

Medication review

Education

Falls Committee

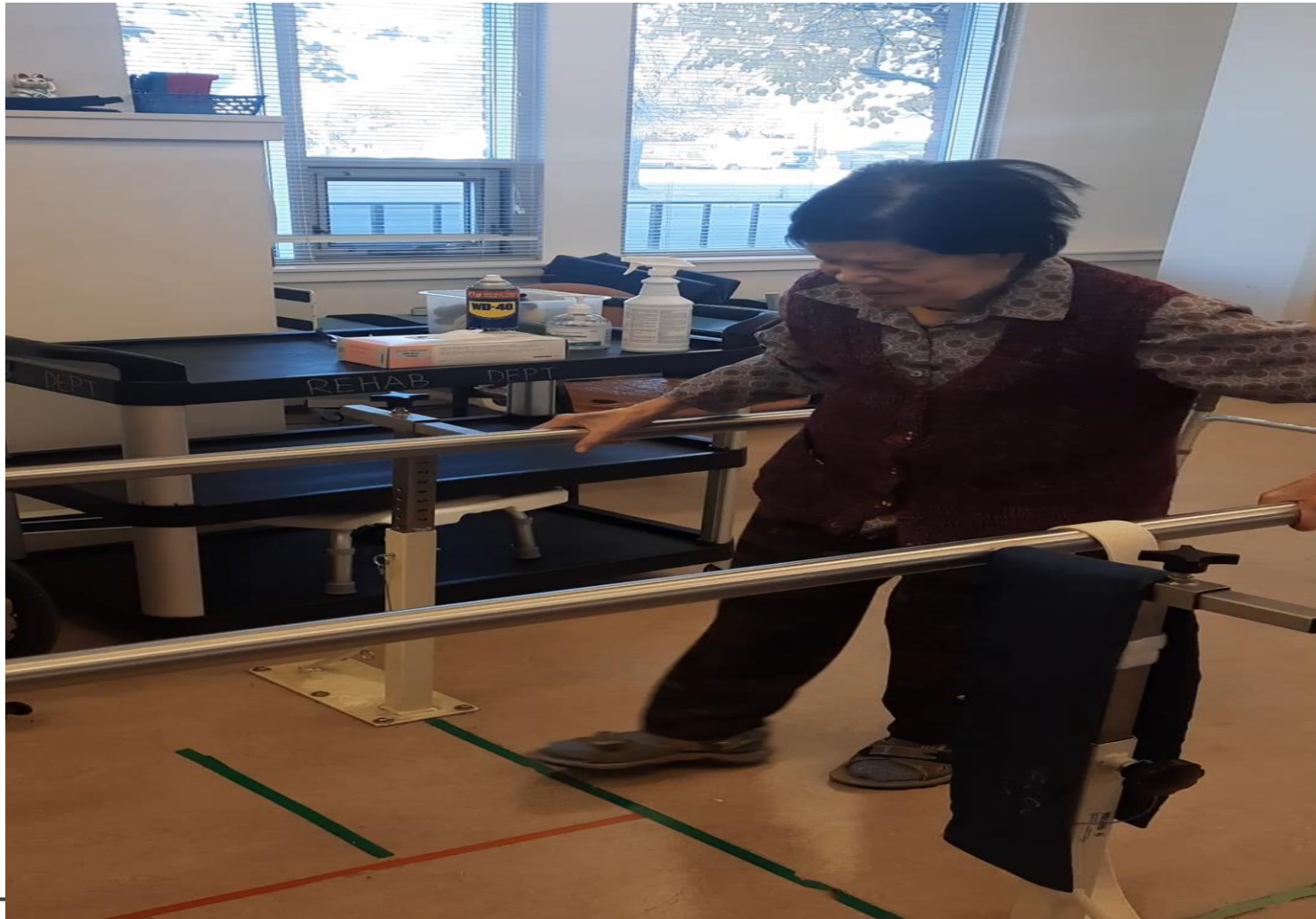
Hopewell S, Adedire O, Copsey BJ, Boniface GJ, Sherrington C, Clemson L, Close JCT, Lamb SE. Multifactorial and multiple component interventions for preventing falls in older people living in the community. Cochrane Database of Systematic Reviews 2018, Issue 7. Art. No.: CD012221. DOI:

10.1002/14651858.CD012221.pub2. Accessed 05 August 2021

The therapy gym



The therapy gym



The therapy gym



What can you as families do?

- Not worry
- Purchase necessary equipment if it is not covered by AADL or AHS
 - Good shoes and hip protectors these items will reduce risk of injury if the resident is assessed for these items
- Educate your loved one

Restraints what are they?

Anything that limits resident's ability to move freely based on their ability



Restraints

The diagram features a large white rectangular area on the left, bounded by a thick grey border. A vertical black line extends from the top of this area towards the center. To the right of this line are two stacked rectangular boxes. The top box is orange and contains the text 'Significant risks'. The bottom box is dark red and contains the text 'Significant psychological harm'. A dark red triangular shape is located in the bottom right corner of the overall image, partially overlapping the bottom right corner of the dark red box.

Significant
risks

Significant
psychological
harm

Restraint Risks

Risks according to a 2006 ethical review

- Bruises
- Pressure ulcers
- Respiratory complications
- Urinary incontinence
- Under nutrition
- Increased dependence
- Impaired muscle strength and balance
- Decreased cardiovascular endurance
- Increased agitation
- **Increased rate mortality from strangulation **

Gastmans, C., & Milisen, K. (2006). Use of physical restraint in nursing homes: clinical-ethical considerations. *Journal of medical ethics*, 32(3), 148–152.

<https://doi.org/10.1136/jme.2005.012708>

Odds Ratio for Mortality

- According to a 1989 study the odds ratio is 53/3 for mortality when comparing restrained residents to non restrained residents

Lofgren, R. P., MacPherson, D. S., Granieri, R., Myllenbeck, S., & Sprafka, J. M. (1989). Mechanical restraints on the medical wards: are protective devices safe?. *American journal of public health*, 79(6), 735–738.

<https://doi.org/10.2105/ajph.79.6.735>

Weighing the Risks

7.6 % rate of minor injury
from falls at ECCC in the
three months

20-30% risk of significant
injury from falls according the
CDC

Compared to 800% increase
rate of mortality seen in that
1989 study when residents
are restrained

Take Aways

- Falls happen and they are risky
- But there are strategies to mitigate the risk
- Restraints introduce a new element of high risk

Questions?

A solid red triangle is positioned in the bottom right corner of the slide, pointing towards the top left.

Contact Information

- If you want to contact me about this afterwards
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- Phone: 780 429 0888 ext. 246

References

- Centers for Disease Control and Prevention. (2017, February 10). *Important facts about falls*. Centers for Disease Control and Prevention. <https://www.cdc.gov/homeandrecrereationalsafety/falls/adultfalls.html>.
- Gastmans, C., & Milisen, K. (2006). Use of physical restraint in nursing homes: clinical-ethical considerations. *Journal of medical ethics*, 32(3), 148–152. <https://doi.org/10.1136/jme.2005.012708>
- Canada, P. H. A. of. (2014, April 10). *Government of Canada*. Canada.ca. <https://www.canada.ca/en/public-health/services/health-promotion/aging-seniors/publications/publications-general-public/seniors-falls-canada-second-report.html>.
- Health, Alberta. (2017, April 11). *Alberta long-term care resident profile*. Alberta long-term care resident profile - Open Government. <https://open.alberta.ca/publications/alberta-long-term-care-resident-profile>.
- Heijnen, M. J., & Rietdyk, S. (2016). Falls in young adults: Perceived causes and environmental factors assessed with a daily online survey. *Human Movement Science*, 46, 86–95. <https://doi.org/10.1016/j.humov.2015.12.007>
- Hopewell S, Adedire O, Copsey BJ, Boniface GJ, Sherrington C, Clemson L, Close JCT, Lamb SE. Multifactorial and multiple component interventions for preventing falls in older people living in the community. *Cochrane Database of Systematic Reviews* 2018, Issue 7. Art. No.: CD012221. DOI: 10.1002/14651858.CD012221.pub2. Accessed 05 August 2021.
- Lofgren, R. P., MacPherson, D. S., Granieri, R., Myllenbeck, S., & Sprafka, J. M. (1989). Mechanical restraints on the medical wards: are protective devices safe?. *American journal of public health*, 79(6), 735–738. <https://doi.org/10.2105/ajph.79.6.735>
- Timsina, L. R., Willetts, J. L., Brennan, M. J., Marucci-Wellman, H., Lombardi, D. A., Courtney, T. K., & Verma, S. K. (2017). Circumstances of fall-related injuries by age and gender among community-dwelling adults in the United States. *PloS one*, 12(5), e0176561. <https://doi.org/10.1371/journal.pone.0176561>
- *Your health system: In depth*. CIHI. (n.d.). Retrieved September 9, 2021, from <https://www.cihi.ca/en/your-health-system-in-depth>.