



Canadian Agency for
Drugs and Technologies
in Health

RAPID RESPONSE REPORT: SUMMARY OF ABSTRACTS



TITLE: Removal of Physical Restraints in Long Term Care Settings: Clinical Safety and Harm

DATE: 11 December 2013

RESEARCH QUESTIONS

1. What is the clinical evidence regarding the safety of the removal of physical restraints from long-term care settings?
2. What is the clinical evidence regarding the harm of the removal of physical restraints from long-term care settings?

KEY MESSAGE

One randomized controlled trial and one non-randomized study were identified regarding the safety and harms of the removal of physical restraints from long-term care settings.

METHODS

A limited literature search was conducted on key resources including Medline, PubMed, The Cochrane Library (2013, Issue 11), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI (Health Devices Gold), Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit retrieval to by publication type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2008 and November 22, 2013. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are

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presented first. These are followed by randomized controlled trials (RCTs) and non-randomized studies,

One RCT and one non-randomized study were identified regarding safety and harms of the removal of physical restraints from long-term care settings. No relevant health technology assessments, systematic reviews, or meta-analyses were identified. Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

Two studies^{1,2} were identified regarding interventions for the reduction of restraint use in long-term care settings. While neither study examined the complete removal of restraints from long-term care, both studies found there to be no significant increase in falls or fall-related injuries associated with a decrease in restraint use. There were also no changes reported in the use of other types of restraints² or an increase in medication use.^{1,2}

REFERENCES SUMMARIZED

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-analyses

No literature identified.

Randomized Controlled Trials

1. Koczy P, Becker C, Rapp K, Klie T, Beische D, Buchele G, et al. Effectiveness of a multifactorial intervention to reduce physical restraints in nursing home residents. *J Am Geriatr Soc.* 2011 Feb;59(2):333-9.
[PubMed: PM21314651](#)

Non-Randomized Studies

2. Gulpers MJ, Bleijlevens MH, Capezuti E, van Rossum E, Ambergen T, Hamers JP. Preventing belt restraint use in newly admitted residents in nursing homes: a quasi-experimental study. *Int J Nurs Stud.* 2012 Dec;49(12):1473-9.
[PubMed: PM22917966](#)

PREPARED BY:

Canadian Agency for Drugs and Technologies in Health

Tel: 1-866-898-8439

www.cadth.ca

APPENDIX – FURTHER INFORMATION:

Systematic Reviews – prevention and reduction of harm

3. Mohler R, Richter T, Kopke S, Meyer G. Interventions for preventing and reducing the use of physical restraints in long-term geriatric care. *Cochrane Database Syst Rev.* 2011;(2).
[PubMed: PM21328295](#)

Non-Randomized Studies – harms or benefits unclear

4. Gulpers MJ, Bleijlevens MH, Ambergen T, Capezuti E, van Rossum E, Hamers JP. Reduction of belt restraint use: long-term effects of the EXBELT intervention. *J Am Geriatr Soc.* 2013 Jan;61(1):107-12.
[PubMed: PM23301773](#)

Additional References

5. Gagnon MP, Desmartis M, Dipankui MT, Gagnon J, St-Pierre M. Alternatives to seclusion and restraint in psychiatry and in long-term care facilities for the elderly: perspectives of service users and family members. *Patient.* 2013 Dec;6(4):269-80.
[PubMed: PM23949927](#)
6. Oklahoma Foundation for Medical Quality and Stratis Health, National Coordinating Center (NCC) for Improving Individual Patient Care (IIPC). Resource guide to support eradicating the use of unnecessary physical restraints [Internet]. Centers for Medicare & Medicaid Services (CMS); 2011 Nov. [cited 2013 Dec 10]. Available from:
http://healthinsight.org/Internal/assets/Nursing%20Home/PhysicalRestraints/PR_Resource_Guide1_from_NCC.pdf
7. Bestic J, Plunkett M, Williams D. Reducing physical restraints in Arizona nursing homes. *Ariz Geriatr Soc J* [Internet]. 2010 [cited 2013 Dec 10];15(2):17-21. Available from:
http://www.hsag.com/App_Resources/Documents/AGSJ_PhysicalRestraints_AZNursingHomes.pdf
8. Goldman BD. Commentary: Barriers to a sustained restraint-free environment. *J Aging Soc Policy.* 2008;20(3):286-94.
[PubMed: PM19024028](#)