TITLE: Side Rails on Beds in Long-Term and Residential Care Facilities: Safety and Evidence Based Guidelines

DATE: 12 September 2013

RESEARCH QUESTIONS

1. What are the evidence-based methods to test the safety of side rails on beds in long-term and residential care?

2. What is the clinical evidence for the safety of side rails on beds in long-term and residential care?

3. What are the evidence-based guidelines and best practices regarding the use of side rails on beds in long-term and residential care?

KEY MESSAGE

Two systematic reviews, one non-randomized study, one evidence-based guideline, and two product recalls were identified regarding the safety and best-practices of side rails on beds in long-term and residential care.

METHODS

A limited literature search was conducted on key resources including PubMed, CINAHL, The Cochrane Library (2013, Issue 7), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2003 and August 28, 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.

Disclaimer: The Rapid Response Service is an information service for those involved in planning and providing health care in Canada. Rapid responses are based on a limited literature search and are not comprehensive, systematic reviews. The intent is to provide a list of sources of the best evidence on the topic that CADTH could identify using all reasonable efforts within the time allowed. Rapid responses should be considered along with other types of information and health care considerations. The information included in this response is not intended to replace professional medical advice, nor should it be construed as a recommendation for or against the use of a particular health technology. Readers are also cautioned that a lack of good quality evidence does not necessarily mean a lack of effectiveness particularly in the case of new and emerging health technologies, for which little information can be found, but which may in future prove to be effective. While CADTH has taken care in the preparation of the report to ensure that its contents are accurate, complete and up to date, CADTH does not make any guarantee to that effect. CADTH is not liable for any loss or damages resulting from use of the information in the report.

Copyright: This report contains CADTH copyright material and may contain material in which a third party owns copyright. This report may be used for the purposes of research or private study only. It may not be copied, posted on a web site, redistributed by email or stored on an electronic system without the prior written permission of CADTH or applicable copyright owner.

Links: This report may contain links to other information available on the websites of third parties on the Internet. CADTH does not have control over the content of such sites. Use of third party sites is governed by the owners’ own terms and conditions.
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 presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines. Product recalls are also included.

Two systematic reviews, one non-randomized study, one evidence-based guideline, and two product recalls were identified regarding the safety and best-practices of side rails on beds in long-term and residential care. No health technology assessments or randomized controlled trials were identified. Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

One systematic review did not identify any studies on bed rails that met their inclusion criteria. In the other identified systematic review, bed rail injuries were found to correlate with outdated designs or incorrect assembly. The use of bed rails did not appear to increase the incidence of falls or injuries. However, caution should be heeded when interpreting these statements as the studies included in this systematic review had methodological limitations. Clinical evidence from one non-randomized study performed in nursing homes, observed that, when there was less administration of sleeping pills and anti-depressants, the use of bed rails appeared to protect against falls but did not eliminate them.

The only identified evidence-based guideline recommended against the use of bed rails to prevent falls or recurrent falls for patients in health care facilities, yet advised they could be used for other discretionary purposes. Two product recalls regarding bed rails were identified; one from Health Canada regarding the risk of bed side rail collapse with the FL14E Rose Bed and a hazard report from ECRI advising of failures near the welds in the bed rails.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses


Randomized Controlled Trials
No literature identified.

Non-Randomized Studies


Guidelines and Recommendations

See: Recommendation 4.0

Product Recalls


PREPARED BY:
Canadian Agency for Drugs and Technologies in Health
Tel: 1-866-898-8439
www.cadth.ca
APPENDIX – FURTHER INFORMATION:

Clinical Practice Guidelines – Methodologies Uncertain


Review Articles


Additional References


