TITLE: Wander Prevention Systems for Patients with Dementia: Clinical Effectiveness, Safety, and Cost-Effectiveness

DATE: 20 July 2011

RESEARCH QUESTIONS

1. What is the clinical evidence on the effectiveness and safety of wander prevention systems for long-term care residents with dementia?

2. What is the cost-effectiveness of wander prevention systems for long-term care residents with dementia?

KEY MESSAGE

The available evidence is limited regarding the effectiveness and safety of wander prevention systems for long-term care residents with dementia. Mobile locator devices may allow for faster locating of wandering patients.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2011, Issue 6), 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, 2006 and July 6, 2011. 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 presented first. These are followed by randomized controlled trials, non-randomized studies, and economic evaluations.

Two health technology assessments, one systematic review, and one non-randomized study were identified concerning the effectiveness or safety of wander prevention systems in patients with dementia. No randomized controlled trials or economic evaluations were identified. Additional items which may be of interest can be found in the appendix.
OVERALL SUMMARY OF FINDINGS

Two health technology assessments\(^1,2\) studied the clinical and cost-effectiveness of non-pharmaceutical interventions to reduce wandering in patients with dementia. Both concluded that there was insufficient evidence available to determine clinical evidence and neither identified relevant cost-effectiveness research. A systematic review\(^3\) on managing wandering in adults living in aged care facilities concluded that mobile locator devices may be effective at enabling quick location of wandering residents based on low level evidence.

A non-randomized study\(^4\) examined the responsiveness of a radio frequency identification (RFID) system and patients’ willingness to wear the associated tags. When sensing 40 tags, the system was found to respond in half a second indoors and five seconds outdoors. Most patients were willing to wear the light tags; however, tags were removed by less compliant patients.

No studies identified the specific technological wander prevention systems examined and none compared one system to another.
REFERENCES SUMMARIZED

Health Technology Assessments


Systematic Reviews and Meta-analyses


Randomized Controlled Trials
No literature identified.

Non-Randomized Studies


Economic Evaluations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Non-randomized studies - patients with dementia at home


Review articles


Manufacturer websites

Note: Availability in Canada is unclear for some systems.


Additional references


