TITLE: Custom versus Off-the-Shelf Seating for Patients Requiring Wheelchairs: Clinical Effectiveness, Cost-Effectiveness, and Guidelines

DATE: 23 October 2015

RESEARCH QUESTIONS

1. What is the clinical effectiveness of custom versus off-the-shelf seating for patients requiring wheelchairs?

2. What is the cost-effectiveness of custom versus off-the-shelf seating for patients requiring wheelchairs?

3. What are the evidence-based guidelines regarding the seating assessment of patients requiring wheelchairs?

KEY FINDINGS

One systematic review was identified regarding the clinical effectiveness of custom versus off-the-shelf seating for patients requiring wheelchairs. In addition, three evidence-based guidelines were identified regarding seating assessments of patients requiring wheelchairs.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library, 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, 2010 and October 9, 2015. 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.

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SELECTION CRITERIA

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

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<th>Table 1: Selection Criteria</th>
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<tr>
<td><strong>Population</strong></td>
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<td><strong>Outcomes</strong></td>
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<td><strong>Study Designs</strong></td>
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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, economic evaluations, and evidence-based guidelines.

One systematic review was identified regarding the clinical effectiveness of custom versus off-the-shelf seating for patients requiring wheelchairs. In addition, three evidence-based guidelines were identified regarding seating assessments of patients requiring wheelchairs. No health technology assessments, randomized controlled trials, non-randomized studies, or economic evaluations were identified.

Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

The findings of one systematic review\(^1\) suggested that a formal assessment was important to determine the appropriate seating surface for each individual. Because of the common need for customization, new equipment trials for individuals were not always possible.

Three evidence-based guidelines\(^2\)\(^-\)\(^4\) were identified regarding the seating assessment of patients requiring wheelchairs. The guidelines recommend that individuals be evaluated and prescribed the appropriate seating surface for their body size, body posture, mobility, and lifestyle requirements.\(^2\) Trained professionals who specialize in “the principles of off-loading” should be used to evaluate the appropriate seating surfaces for individuals requiring wheelchairs.\(^3\) Both the vendor and a qualified occupational or physiotherapist should be present at the time a custom wheelchair is delivered to the patient.\(^4\)
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses


Randomized Controlled Trials
No literature identified.

Non-Randomized Studies
No literature identified.

Economic Evaluations
No literature identified.

Guidelines and Recommendations


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APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies – No Comparator

