TITLE: Pharmacy-Prepared Compounded Solutions for Older Patients in Long-Term Care: Clinical Effectiveness and Guidelines

DATE: 28 January 2016

RESEARCH QUESTIONS

1. What is the clinical effectiveness of pharmacist-prepared compounded solutions or suspensions for patients who are unable to take oral medications?

2. What are the evidence-based guidelines regarding the use of compounded oral solutions or suspensions for patients who are unable to take oral medications?

KEY FINDINGS

No health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or non-randomized studies were identified regarding the clinical effectiveness of pharmacist-prepared compounded solutions or suspensions for patients who are unable to take oral medications. No evidence-based guidelines were identified regarding the use of compounded oral solutions or suspensions for patients who are unable to take oral medications.

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. The search was limited to English language documents published between Jan 1, 2006 and Jan 26, 2016. Internet links were provided, where available.

SELECTION CRITERIA

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

<table>
<thead>
<tr>
<th>Population</th>
<th>Patients in nursing homes or long-term care who have trouble swallowing but require medication that is delivered orally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Oral suspension/compounded medications that are normally taken orally but are prepared by a pharmacy and delivered by j-tube or other tube (into the GI system) for patients with difficulty swallowing</td>
</tr>
<tr>
<td>Comparator</td>
<td>Suspension or compounded solutions made by the manufacturer, prepared by nurses; any other delivery; no comparator</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Q1: Benefit, symptom management, safety, risk Q2: Best practices, guidelines</td>
</tr>
<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, guidelines</td>
</tr>
</tbody>
</table>

RESULTS

No health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or non-randomized studies were identified regarding the clinical effectiveness of pharmacist-prepared compounded solutions or suspensions for patients who are unable to take oral medications. No evidence-based guidelines were identified regarding the use of compounded oral solutions or suspensions for patients who are unable to take oral medications.

References of potential interest are provided in the appendix.

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies
No literature identified.

Guidelines and Recommendations
No literature identified.

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

Non-Randomized Studies

**General Population**


**Alternate Outcomes**


**Clinical Practice Guidelines**


**Review Articles**


Additional References
