TITLE: Home Peritoneal Dialysis: Clinical and Cost-Effectiveness and Guidelines

DATE: 28 October 2015

RESEARCH QUESTIONS

1. What is the clinical effectiveness of home peritoneal dialysis?
2. What is the cost-effectiveness of home peritoneal dialysis?
3. What are the evidence-based guidelines associated with the use of home peritoneal dialysis?

KEY FINDINGS

One health technology assessment, eight systematic reviews (three with meta-analyses), 15 economic evaluations, and four evidence-based guidelines were identified regarding home peritoneal dialysis.

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. Methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, economic studies, and guidelines. The search was also limited to English language documents published between January 1, 2010 and October 23, 2015.

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 with chronic kidney disease (CKD) requiring dialysis (regardless of co-morbidities)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Home peritoneal dialysis (e.g., including, but not limited to, continuous ambulatory peritoneal dialysis and automated peritoneal dialysis)</td>
</tr>
</tbody>
</table>
| Comparator          | Q1: Institution-based hemodialysis (e.g., dispensed in hospitals or dialysis facilities); Home-based hemodialysis (e.g., administered at home under patient self-care)  
Q2: Institution-based hemodialysis (i.e., dispensed in hospitals or dialysis facilities); No comparator  
Q3: No comparator |
| Outcomes            | Q1: Clinical effectiveness (e.g., benefit, safety, mortality, quality of life, patient preference and satisfaction) of peritoneal dialysis, and in comparison to institution-based hemodialysis  
Q2: Cost-effectiveness outcomes for peritoneal dialysis, and in comparison to institution-based hemodialysis  
Q3: Guidelines regarding the use of, and patient selection for, peritoneal dialysis |
| Study Designs       | Health technology assessments, systematic reviews, meta-analyses, economic evaluations, evidence-based guidelines |

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 economic evaluations and evidence-based guidelines.

One health technology assessment, eight systematic reviews (three with meta-analyses), 15 economic evaluations, and four evidence-based guidelines were identified regarding home peritoneal dialysis.

Additional references of potential interest are provided in the appendix.

Health Technology Assessments


Systematic Reviews and Meta-analyses


Systematic Reviews of Economic Studies


Economic Evaluations


Guidelines and Recommendations


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

Clinical Practice Guidelines – Methodology Not Specified


Review Articles


Economic


Additional References
