TITLE: Diagnostic Imaging and Laboratory Services: Clinical Evidence and Cost-Effectiveness

DATE: 10 August 2011

RESEARCH QUESTIONS

1. What is the clinical evidence regarding the impact of overutilization of diagnostic imaging services, such as magnetic resonance imaging, computed tomography scan, and ultrasound?

2. What is the cost-effectiveness of diagnostic imaging services, such as magnetic resonance imaging, computed tomography scans, and ultrasound?

3. What is the cost-effectiveness of laboratory services?

METHODS

A focused search (with main concepts appearing in title or major subject heading) was conducted on key resources including PubMed, The Cochrane Library (2011, 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. Methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses and economic studies. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2006 and August 3, 2011. Internet links were provided, where available.

KEY MESSAGE

No literature was identified on the clinical evidence regarding the impact of overutilization of diagnostic imaging services. The results of the economic evaluations on diagnostic imaging and laboratory services were inconsistent, so no definitive conclusions could be made.
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.

The literature search identified twenty-nine economic evaluations regarding the cost-effectiveness of diagnostic and laboratory services. No relevant health technology assessments, systematic reviews, and meta-analyses were identified regarding the impact of overutilization of diagnostic imaging services. Additional articles of potential interest are found in the appendix.

Health Technology Assessments
No literature identified

Systematic Reviews and Meta-analyses
No literature identified

Economic Evaluations

Diagnostic Imaging Services


Laboratory Services


APPENDIX – FURTHER INFORMATION:

Systematic Reviews (Clinical Outcomes Not Reported)


Economic Studies (Cost Analysis)


Review Articles


Additional References


