TITLE: Rotavirus Vaccination Programs: Cost-Effectiveness

DATE: 02 May 2012

RESEARCH QUESTION

What is the cost-effectiveness of rotavirus vaccination in North America for the prevention of rotavirus infection?

KEY MESSAGE

Two economic evaluations were identified regarding the cost-effectiveness of rotavirus vaccination for the prevention of rotavirus infection in North America.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2012, Issue 4), University of York Centre for Reviews and Dissemination (CRD), and ECRI (Health Devices Gold) 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, 2002 and April 23, 2012. 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 economic evaluations.
Two economic evaluations regarding the cost-effectiveness of rotavirus vaccination for the prevention of rotavirus infection in North America were identified. No relevant health technology assessments or systematic reviews were identified. Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

The two included economic evaluations\(^1,2\) sought to determine the cost-effectiveness of rotavirus vaccination in the United States. The first study\(^1\) used a probabilistic model to compare the cost of vaccination with Rotarix versus RotaTeq. The authors determined that full vaccination of all children with Rotarix instead of RotaTeq would reduce costs by $77.2 million. The authors of the second study\(^2\) used Monte Carlo analyses to determine cost-effectiveness of rotavirus vaccination from both the health care and societal perspectives. Assuming administration costs of the vaccine were $10, the break-even price per dose was $42 from the societal perspective and $12 from the health care perspective. The authors determined that rotavirus vaccination was unlikely to be cost-saving in the United States at the time the study was conducted, but could potentially still be considered cost-effective.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Economic Evaluations


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APPENDIX – FURTHER INFORMATION:

Economic Evaluations – International


Listing Decision


Review Articles

North America


Additional References

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