TITLE: Rapid Urinalysis for Detecting Urinary Tract Infections: Cost-Effectiveness

DATE: 07 June 2016

RESEARCH QUESTION

What is the cost-effectiveness of rapid urinalysis for detecting bacterial infection in patients with suspected urinary tract infections?

KEY FINDINGS

No relevant literature was identified regarding the cost-effectiveness of rapid urinalysis for detecting bacterial infection in patients with suspected urinary tract infections.

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, ECRI Institute, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit retrieval by publication type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2006 and May 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.

| Population | Patients in any setting (e.g., in hospital, community, long-term care, etc.) with suspected urinary tract infection |
| Intervention | Rapid urinalysis technologies (e.g., Sysmex UF1000) |
| Comparator | Standard of care (i.e., urine dipsticks, microbial plating) |
| Outcomes | Cost-effectiveness outcomes (e.g., cost per QALY, downstream cost savings related to treatment [i.e., antibiotic prescriptions avoided]) |

Disclaimer: The Rapid Response Service is an information service for those involved in planning and providing health care in Canada. Rapid responses are based on a limited literature search and are not comprehensive, systematic reviews. The intent is to provide a list of sources of the best evidence on the topic that the Canadian Agency for Drugs and Technologies in Health (CADTH) could identify using all reasonable efforts within the time allowed. Rapid responses should be considered along with other types of information and health care considerations. The information included in this response is not intended to replace professional medical advice, nor should it be construed as a recommendation for or against the use of a particular health technology. Readers are also cautioned that a lack of good quality evidence does not necessarily mean a lack of effectiveness particularly in the case of new and emerging health technologies, for which little information can be found, but which may in future prove to be effective. While CADTH has taken care in the preparation of the report to ensure that its contents are accurate, complete and up to date, CADTH does not make any guarantee to that effect. CADTH is not liable for any loss or damages resulting from use of the information in the report.

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Table 1: Selection Criteria

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<tr>
<th>Study Designs</th>
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<td>Health technology assessments, systematic reviews, meta-analyses, economic evaluations</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 economic evaluations.

No relevant health technology assessment reports, systematic reviews, meta-analyses, or economic evaluations were identified regarding the cost-effectiveness of rapid urinalysis for detecting bacterial infection in patients with suspected urinary tract infections.

References of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

No relevant literature was identified regarding the cost-effectiveness of rapid urinalysis for detecting bacterial infection in patients with suspected urinary tract infections; therefore, no summary can be provided.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Economic Evaluations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies

   PubMed: PM27189024

   PubMed: PM26491183

   PubMed: PM25444045

   PubMed: PM25734092

   PubMed: PM20231611