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Extended Research Article

Rapid tests to inform triage and antibiotic prescribing decisions for adults presenting with suspected acute respiratory infection: a rapid evidence synthesis of clinical effectiveness and cost–utility studies

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Plain language summary

Rapid tests to inform triage and antibiotic prescribing decisions for adults presenting with suspected acute respiratory infection: a rapid evidence synthesis of clinical effectiveness and cost–utility studies

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Plain language summary

Acute respiratory infection is a group of common diseases caused by viruses or bacteria. Examples of acute respiratory infections include 'cold' and flu. When people consult a doctor (or other healthcare professionals) for suspected acute respiratory infection, it is not always easy for the doctor to identify what is causing the symptoms. The doctor also needs to assess whether the patient's condition is serious or may become serious. Laboratory tests can provide useful information to help the doctor decide what to do next, but it takes several hours or days to get the test results back. This delay means the doctor cannot use the test results to make a decision while seeing the patient. Rapid tests that can be done and produce results quickly (within 45 minutes) are now available. It is currently unclear whether the use of these rapid tests to assess patients would improve or worsen patient outcomes or increase or decrease costs overall.

We conducted a rapid review (i.e. using systematic but streamlined methods to improve efficiency) of the literature to summarise the best available published evidence to help answer these questions. We found that rapid tests for C-reactive protein (a substance that tends to increase in our blood when we have inflammation caused by an infection or other conditions) may reduce the perceived need for doctors to prescribe antibiotics, but the number of patients who come back to see the doctor again may increase. There is still some uncertainty in this evidence. Our review found that the test may represent good value for money, but the studies were limited as they only considered costs and health implications in the short term. Evidence either is very limited to draw conclusions or did not indicate good value for money for the other rapid tests that we evaluated.

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This article

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