# Technology Assessment Report commissioned by the NIHR Evidence Synthesis Programme on behalf of the National Institute for Health and Care Excellence

**Title of Project:**  Point of care tests for urinary tract infections (UTI) to reduce antimicrobial resistance: a systematic review and conceptual economic model to inform Early Value Assessment (EVA) (DAP 69)

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# Plain English Summary

## What is the problem?

Urine infections are very common but can be difficult to diagnose. The GP will diagnose a urine infection based on symptoms and sometimes they will send a urine sample to the lab. The GP will usually give antibiotics before knowing the lab test results (which can take up to a week). Some people will be given the wrong antibiotic and some will have antibiotics unnecessarily.

New "rapid tests" can be done in the GP surgery or pharmacy and will quickly tell (some in just a few minutes) whether you have a urine infection. Some can also tell which bug is causing the infection and which antibiotic will work best.

## What did we do?

We wanted to know whether using "rapid tests" to diagnose urine infections means more people are: correctly diagnosed, diagnosed more quickly, and treated with the right antibiotic more quickly. We also wanted to know whether these tests are a good use of NHS money. We reviewed existing research and developed an economic (cost) model.

## What did we find?

There is very little information available on these "rapid tests". Tests were only looked at by a few studies each, and the people studied differed a lot. Rapid tests that can detect a urine infection in under 40 minutes showed promise, but there were not enough data to know whether they are a good use of NHS money. More studies are needed to answer this question and to determine whether results vary across different populations.