

Improving diagnosis of Urinary Tract Infection in older adults

This opportunity is now closed

Overview

Opportunity status: Closed

Type: Programme

Opening date: 26 July 2024

Closing date: 27 November 2024 at 1:00 pm

Reference ID: 2469

The Health Technology Assessment (HTA) Programme is accepting Stage 1 applications to their commissioned workstream for this primary research topic.

In order to apply you will need to carefully review the:

- [Stage 1 application supporting information \(/hta-programme-supporting-information-realms\)](#)
- [Stage 1 guidance notes \(/hsdr-programme-stage-1-guidance-notes-realms\)](#)

Applications received by the advertised closing date will be considered at a first-stage funding committee meeting, and successful applicants will then be invited to submit a Stage 2 application. Applicants will have 8 weeks to complete and submit their Stage 2 application form, which will then be considered at the following HTA funding committee meeting. For more information, please read the commissioning brief.

All primary research projects are expected to establish a programme appointed Study Steering Committee and it is important that you read the [Research Governance Guidance \(/about-us/who-we-](#)

[are/policies-and-guidelines/research-governance-guidelines](#)) before completing your application. Costs incurred by this committee should be included in the budget as appropriate.

Studies within a trial or review

This funding opportunity is eligible for a SWAT/SWAR (study within a trial or study within a review), which can help significantly improve methodology of future research as well as the host study. Find out about the [benefits of SWATs/SWARs and how to include one in your application](#) ([/methodological-sub-studies-studies-within-trial-or-project-swat-and-studies-within-review-swar](#)).

This opportunity is now closed

You can review information about this funding opportunity in our application system

[View details](#)

Commissioning Brief

Introduction

The aim of the Health Technology Assessment (HTA) Programme is to ensure that high quality research information on the clinical effectiveness, cost-effectiveness and broader impact of healthcare treatments and tests are produced in the most efficient way for those who plan, provide or receive care from NHS and social care services. The commissioned workstream invites applications in response to calls for research on specific questions which have been identified and prioritised for their importance to the NHS, patients and social care.

Research question

Can diagnosis of Urinary Tract Infection (UTI) in older adults be improved based on a combination of clinical factors and rapid testing?

1. Patient group: Older people (over 65 years old) with suspected UTI, including those who are frail and those experiencing delirium. Applicants to define and justify levels of frailty included and to consider the importance of gaining informed consent from any patients who fall within the more vulnerable groups and how to ensure ease of recruitment.

Applications are encouraged which include recruitment from populations with high disease burden which have been historically underserved by research activity in this field, e.g., Care

homes.

2. **Technology:** A combination of clinical assessment and diagnostic technologies modalities to best define probability of patient having a UTI/may be the most effective means of testing this and we are testing what combination. Applications are expected that investigate multiple technologies within the study. Applicants should specify and justify the diagnostic tests of their choice, which should have a demonstrated signal of efficacy for detecting Urinary Tract Infection (UTI) and be suitable for use in the NHS.
3. **Outcomes and outputs:** Correct diagnosis of UTI/no UTI; accuracy of diagnostic tests (including, but not limited to, sensitivity and specificity); time to results/time to decision making; estimates of cost-effectiveness; service metrics (e.g., hospitalisations, length of stay); clinician and patient acceptability and usability/accessibility.
Existing Core Outcomes should be included amongst the list of outcomes unless a good rationale is provided to do otherwise. Applicants are encouraged to report recruitment and findings disaggregated by sex (and other demographic factors where relevant).
4. **Setting:** Urgent care in any relevant setting where this presentation is likely to occur e.g., hospitals, virtual wards, care homes, GP practices, pharmacies. The study could examine the performance of tests in different clinical and community settings as applied in routine practice.
5. **Study design:** Comparison of diagnostic tests.
6. **Longer-term follow-up:** If appropriate, researchers should consider obtaining consent to allow potential future follow-up through efficient means (such as routine data) as part of a separately funded study.

Rationale

Infection is a major issue for patients and healthcare providers. Urinary Tract Infections (UTIs) are one of the most common conditions presenting in primary care, with higher prevalence in older people. Standard diagnostic tests for UTI (e.g., urine dipstick tests) do not work well in the older adult population, therefore, misdiagnosis is widespread. There is no clinical guidance available for UTI diagnosis in older adults, although the SIGN guidance in adult women acknowledges the increased incidence of asymptomatic bacteriuria and overdiagnosis of UTI leading to unnecessary antibiotic prescribing in older adults.

Accurate diagnosis of UTI is important for two reasons; firstly, because missed infections can lead to adverse consequences, including sepsis and death, and secondly, because antibiotics are often

prescribed before test results are received which can cause unnecessary treatment for patients who do not have a UTI. This overprescribing of antibiotics can lead to consequences for the general population such as antimicrobial resistance (AMR).

Diagnostic tests that are better able to identify UTI, and do so rapidly, are required for older adults. A number of potential alternative diagnostic tests have been developed that have shown evidence of effectiveness in this population, however, they have not been directly compared to each other, to usual care (urine dipstick or urine culture), or to the newly developed UTI reference standard (published in March 2023) to assess their sensitivity and specificity in this population.

The lack of a reference standard has hampered research in this area, however, the recent publication of a UTI reference standard and the increasing evidence for alternative diagnostic tests paves the way for timely research that would enable more accurate diagnosis and treatment of UTI in older adults. The HTA programme, therefore, wishes to fund a study that will improve diagnosis of UTI in older adults based on a combination of clinical factors and rapid testing.

The HTA Programme intends to advertise a subsequent call for a randomised controlled trial of test(s) found to be most successful in this study. A strong application will be expected to help inform and justify the best design for a future prospective randomised trial.

Additional commissioning brief background information

A background document is available that provides further information to support applicants for this call. It is intended to summarise what prompted the call and the existing evidence base, including relevant work from the HTA and wider NIHR research portfolio. It was researched and written on the basis of information from a search of relevant sources and databases, and in consultation with a number of experts in the field. If you would like a copy, please email htaresearchers@nihr.ac.uk (<mailto:htaresearchers@nihr.ac.uk>).

Making an application

If you would like to apply for this call, you can begin your application via the funding call page.

Your application must be submitted online no later than 1pm on 27 November 2024. Applications will be considered by the HTA Funding Committee at its meeting in January 2025.

[Guidance notes \(/hta-programme-stage-1-guidance-notes-realms\)](#) and [supporting information \(/hta-programme-supporting-information-realms\)](#) for HTA Programme applications are available.

Shortlisted Stage 1 applicants will be given 8 weeks to submit a Stage 2 application. The Stage 2 application will be considered at the Funding Committee in May 2025.

Applications received electronically after 1pm on the due date will not be considered.

For commissioned topics, the Programme strongly discourages the practice of the same co-applicant joining more than one competing team, other than in unusual circumstances (for example, a lead from a named charity or a unique national expert in a condition).

For such exceptions, each application needs to state the case as to why the same person is included. The shared co-applicant should not divulge application details between teams, and both teams should acknowledge in their application that they are aware of the situation, and that study details have not been shared.

Should you have any queries please contact htacommissioning@nihr.ac.uk (<mailto:htacommissioning@nihr.ac.uk>).

Supporting Information

- [HTA tips for applicants](#) (/hta-tips-applicants)

Contact Details

- For help with your application contact htafunding@nihr.ac.uk (<mailto:htafunding@nihr.ac.uk>)
- For more information about the funding Programme, visit the [HTA page](#) (/node/62891)
- Got a research idea and not sure how to turn it into a funding application? The NIHR Research Support Service (RSS) supports researchers in England to apply for funding, and to develop and deliver clinical and applied health, social care and public health research post award. [Find out how the RSS can help you](https://www.nihr.ac.uk/explore-nihr/support/research-support-service/) (<https://www.nihr.ac.uk/explore-nihr/support/research-support-service/>)