Health Technology Assessment Programme

National Institute for Health Research

HTA no 16/12

Aids to cancer diagnosis in primary care

Introduction

The aim of the HTA Programme is to ensure that high quality research information on the effectiveness, costs and broader impact of health technology is produced in the most efficient way for those who use, manage, provide care in or develop policy for the NHS. Topics for research are identified and prioritised to meet the needs of the NHS. Health technology assessment forms a substantial portfolio of work within the National Institute for Health Research and each year about fifty new studies are commissioned to help answer questions of direct importance to the NHS. The studies include both primary research and evidence synthesis.

Research Question:

What is the clinical and cost-effectiveness of using an established cancer primary care risk tool to predict a patient's cancer risk?

1. **Intervention:** Established cancer risk decision-making tools or aids for common cancers to help primary care practitioners predict cancer risk based on patient's symptoms and characteristics (researchers to define and justify).
2. **Patient group:** Patients presenting to primary care with symptoms which may be suggestive of cancer.
3. **Setting:** Primary care.
4. **Control:** Standard care.
5. **Study design:** (i) An evidence synthesis through a comprehensive systematic review of primary research (to include all forms of relevant evidence) and modelling of potential patient and resource-level consequences (researchers could consider stratifying by risk score threshold level), and (ii) a survey of current practice in primary care.
6. **Important outcomes:** Clinical effectiveness of risk prediction tools or aids; patient and resource-level consequences.

   Other outcomes: Survey findings such as the list of tools currently used; recommendations for further research.
7. **Minimum duration of follow-up:** n/a.

NHS decision problem to be addressed by this research:

More than one in three people in the UK will develop cancer during their lifetime. The majority of these patients will present with symptoms to their primary care provider. Early identification of these patients, and thus quick referral for specialist care, is integral to improving cancer outcomes in the UK. One way in which to improve the identification and referral of patients with cancer symptoms in primary care is to use a decision-support tool.

There are a number of cancer risk algorithms currently used in the UK, such as the Risk Analysis Tool (RAT) and QCancer risk predictors. These can be used as part of a decision-support tool to present the GP with a risk score for a patient based on historic or inputted symptom and other data. They can assist the GP in deciding on appropriate referral/investigation of a patient who presents with a symptom. There may also be other algorithms and tools from outside the UK which could also be appropriate for the UK context.

There are a large number of studies assessing these tools within primary care. However there are no systematic reviews pulling together these studies to assess their use in predicting all types of cancer. There is also little evidence evaluating their cost-effectiveness. The recently updated NICE guidelines on suspected cancer do not include decision tools, yet these tools are starting to be used in clinical practice. Further research is therefore needed to establish the clinical and cost-effectiveness of using an established cancer primary care risk tool to predict a patient's cancer risk. A survey of current practice in primary care, and a systematic review of current literature (with economic modelling of cost-effectiveness) is proposed.

Making an application

The NIHR Health Technology Assessment Programme is funded by the NIHR, with contributions from the CSO in Scotland, NISCHR in Wales, and the Public Health Agency in Northern Ireland.

If you wish to submit a proposal on this topic, complete the on-line application form at www.nets.nihr.ac.uk/funding/hta-commissioned and submit it on line by **19 May 2016.**

Your full proposal will be assessed by designated board members, alongside other applications submitted in the same topic area. A maximum of three proposals will be taken forward for peer review by external referees, and subsequent consideration by the HTA Funding Board at its meeting in **September 2016**.

In line with the government's transparency agenda, any contract resulting from this tender may be published in its entirety to the general public. Further information on the transparency agenda is at: http://transparency.number10.gov.uk/#

Applicants are recommended to seek advice from suitable methodological support services, at an appropriate stage in the development of their research idea and application. It is advisable to make contact at an early a stage as possible to allow sufficient time for discussion and a considered response.

The NIHR Research Design Service (http://www.rds.nihr.ac.uk/) can advise on appropriate NIHR Programme choice, and developing and designing high quality research grant applications.

Clinical Trials Toolkit

Researchers designing or undertaking clinical trials are encouraged to consult the Clinical Trials Toolkit (www.ct-toolkit.ac.uk). This NIHR resource is a website designed to help researchers navigate through the complex landscape of setting up and managing clinical trials in line with regulatory requirements. Although primarily aimed at those involved in publicly funded Clinical Trials of Investigational Medicinal Products (CTIMPs), the Toolkit will also benefit researchers and R&D staff

working on trials in other areas, who will find useful information and guidance of relevance to the wider trials environment.

Applications received electronically after 1300 hours on the due date will not be considered.

Please see GUIDANCE ON APPLICATIONS below.

Guidance on applications

Methods

Applicants should demonstrate knowledge of current research in the field and of systematic review methods and state how these would apply to the question posed. Valid and reliable methods should be proposed for identifying and selecting relevant material, assessing its quality and synthesising the results. Guidance on choice of appropriate methods is contained in NHS CRD Report *Systematic Reviews: CRD's guidance for undertaking reviews in health care (third edition)* (www.york.ac.uk/inst/crd/index_guidance.htm). Where established Core Outcomes exist they should be included amongst the list of outcomes unless there is good reason to do otherwise. Please see The COMET Initiative website at www.comet-initiative.org to identify whether Core Outcomes have been established. Where policy implications are considered, the emphasis should be on assessing the likely effects of a range of policy options open to decision makers rather than a judgement on any single strategy. Where epidemiological modelling or economic evaluation is required, the range of uncertainty associated with the results should be assessed. In the assessment of cost-effectiveness, further data collection may be required to estimate resource use and costs. If there is evidence that the ratio of costs and benefits may differ between readily identifiable groups, applicants are encouraged to state how they will identify these differences. Where relevant, researchers should explore the effect of the intervention in relation to health inequalities.

Cochrane

Applicants wishing to produce and maintain a Cochrane systematic review from a HTA commissioned systematic review should make the case in their proposal. This will need to include the approval of the relevant Cochrane Review Group (www.cochrane.org). Any additional costs associated with the initial preparation of a Cochrane review should be included in your project proposal. Maintenance costs cannot be met.

Diagnostics and Imaging

In evaluating diagnostic and imaging techniques, the emphasis of the HTA Programme is to assess the effect on patient management and outcomes (particularly where changes in management can be shown to have patient benefits). Improvements in diagnostic accuracy, whilst relevant, are not the primary interest of this commissioned research programme. Applicants should justify where they consider improvements in diagnostic accuracy to be relevant to these objectives. Where there is poor evidence to link diagnostic improvements to patient benefits, part of the research may be to assess the effects of such changes on patient outcome.

Public involvement in research

The HTA Programme recognises the benefit of increasing active involvement of members of the public in research and would like to support research projects appropriately. The HTA Programme

encourages applicants to consider *how* the scientific quality, feasibility or practicality of their proposal *could* be improved by involving members of the public. Examples of how this has been done for health technology assessment projects can be found at www.nets.nihr.ac.uk/ppi. Research teams wishing to involve members of the public should include in their application: the aims of active involvement in this project; a description of the members of the public (to be) involved; a description of the methods of involvement; and an appropriate budget. Applications that involve members of the public will not, for that reason alone, be favoured over proposals that do not but it is hoped that the involvement of members of the public will improve the quality of the application.

Updating

It is the policy of NETSCC, HTA that all search strategies undertaken as part of evidence synthesis/secondary research projects must not be more than 12 months out of date when the draft final report is submitted. We expect that most projects will manage to bring their searches up to date prior to analysis and writing up. As research funders we are aware that exceptional circumstances can apply that would not allow this to be case but this must be the exception rather than the rule and will be assessed on a case by case basis. The expectation is that projects funded by the HTA Programme will deliver information that is both relevant and timely.

In addition, in order to inform decisions on whether and when to update the review, researchers will be expected to give some indication of how fast the evidence base is changing in the field concerned, based on the nature and volume of on-going work known at the time the review is completed. Applicants should note that they will not be expected to carry out any future updating as part of the contract to complete the review.

Communication

Communication of the results of research to decision makers in the NHS is central to the HTA Programme. Successful applicants will be required to submit a single final report for publication by the HTA Programme. They are also required to communicate their work through peer-reviewed journals and may also be asked to support NETSCC, HTA in further efforts to ensure that results are readily available to all relevant parties in the NHS. Where findings demonstrate continuing uncertainty, these should be highlighted as areas for further research.

Timescale

There are no fixed limits on the duration of projects or funding. However, there is a pressing need within the NHS for the information and so the research would normally be expected to be completed as soon as possible – however it is for applicants to justify the duration and costs proposed.