A clinical decision rule to help decide on cessation of anticoagulant therapy

Introduction

The aim of the HTA programme is to ensure that high quality research information on the effectiveness, costs and broader impact of health technologies 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.

Question

The development and validation of a clinical decision rule to help decide on the cessation of anticoagulant therapy in patients with idiopathic venous thromboembolism (VTE).

1 **Technology:** A clinical decision rule.
2 **Patient group:** Patients with idiopathic VTE being considered for cessation of anticoagulant therapy.
3 **Setting:** Primary/secondary care.
4 **Control or comparator treatment:** Usual care (to be defined by researcher).
5 **Design:** Research using individual patient data from existing trial datasets to develop a clinical decision rule to identify patients with idiopathic VTE in whom anticoagulation therapy can be 'safely' ceased. Proposals should explore the inclusion of a range of tests such as D-dimer and other tests for "thrombophilia" or hypercoagulability as well as combinations of risk factors and identify at what point testing can appropriately be carried out and decisions to cease or continue therapy be made. The rule should subsequently be validated in a separate study population.
6 **Important outcomes:** A clinical decision rule, adverse events, and cost-effectiveness.

Background to commissioning brief:

The optimal duration of anticoagulation for patients with a first episode of unprovoked venous thromboembolism (VTE), occurring in the absence of a known risk factor, is uncertain.

Stopping anticoagulant therapy places some patients at risk of morbidity and mortality due to recurrent VTE, whereas continuing anticoagulation exposes patients to an increased risk of bleeding, inconvenience from repeated medication reviews, and there are continuing costs of such treatment.

Identifying patients at low risk of recurrent VTE who may derive little benefit from prolonged anticoagulation will help clinicians decide whether to stop or to continue anticoagulant therapy. This issue has been subject of much research to date although findings have been inconclusive.

This commissioning brief wishes applicants to explore and combine a larger range of trial datasets to develop and validate a clinical decision rule for the cessation of anticoagulant therapy in this group of patients.

Making an application

If you wish to submit an outline proposal on this topic, complete the on-line application form at http://www.hta.ac.uk/funding/standardcalls/index.shtml and submit it on line by **1pm 13th January 2011.** Applications will be considered by the HTA Commissioning Board at its meeting in March 2011. For outline applications, if shortlisted, investigators will be given a minimum of eight weeks to submit a full proposal.

NB. Please note that for this call we are expecting applicants to fill in the outline proposal form as detailed on the website.

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

Please see GUIDANCE ON APPLICATIONS overleaf.

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)* (http://www.york.ac.uk/inst/crd/systematic_reviews_book.htm). 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.

Cochrane

Applicants wishing to produce and maintain a Cochrane systematic review from this 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.

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 http://www.hta.ac.uk/PPIguidance/. 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 ongoing 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.