

Commissioning Brief
**12/178 - Evaluating interventions to identify and reduce avoidable mortality in
hospitals**
Closing date: 17 January 2013

1. Remit of this call: main topic areas identified

This call invites research leading to a better understanding of which strategies are effective in identifying and reducing excess mortality in hospitals. Excess mortality has been defined in new national standards, using risk-adjusted data for deaths in hospital and thirty days after discharge.

Hospitals are increasingly focused on mortality rates as an indicator of quality of care and performance. Those with higher levels are urged to take action to reduce avoidable mortality by a range of measures, from changes to deployment of senior clinical staff in emergency departments to better monitoring of deteriorating patients. Many hospitals combine these interventions in programmes of care to reduce mortality. But more research is needed to understand better which strategies are effective in identifying and dealing with unexpected or excess mortality.

High quality health services research is invited to address key knowledge gaps. Most of these will involve complex service initiatives and mixed-methods will usually be needed. A good example of an ambitious study in the current programme portfolio is a five-year evaluation of the Advancing Quality initiative in the north west of England.

Key research gaps in this area have been identified and proposals must address only one or more of these areas:

- **Identifying and understanding excess mortality and its causes**

Since the end of 2011, a new summary hospital-level mortality indicator has been agreed as an official statistic. This includes process measures to check the quality of data, such as proportion of admissions with correct palliative care coding to address previous concerns about quality of data in estimating avoidable deaths. This represents a substantial step forward, given the contested nature of previous measures used. However, descriptive research would be useful to establish how trusts collect and code data (crude and adjusted) and how they interpret this measure together with other relevant data, such as unexpected deaths from low-risk procedures or serious untoward incidents. This might include dynamic approaches for real-time review, led by senior doctors and nurses, to reflect on recent deaths and use case note review or mortality and morbidity meetings to identify key system weaknesses and possible causes of excess mortality.

- **Evaluating effectiveness of strategies and interventions to reduce excess mortality**

The main part of this call aims to encourage high quality studies to evaluate the effectiveness of interventions to reduce excess mortality. Hospitals have deployed different strategies to date. These might focus on general improvements in patient care – such as implementing evidence-based care bundles (from surgical site infections to ventilator-acquired pneumonia), improving handover or identifying deteriorating patients.

They might also include organisational changes such as seven day consultant services¹ or changes in the management of medical outliers. The NHS Institute has identified some core interventions in reducing avoidable mortality – standardised systems for assessing clinical observations (early warning scores); clinical bundles and critical care outreach teams. This is a useful starting point, but other interventions such as those listed above would also be considered. This is the most important part of the call and we hope to attract robust bids to add to the evidence base on what works. Care needs to be given to study design – for instance, uncontrolled single-centre studies are likely to have limited impact. In addition to robust quantitative analysis which takes into account potential confounding factors, the Programme would like to see sophisticated, theory-driven process evaluations which provide learning on implementation for others.

2. Purpose of call

This topic is of pressing concern to managers, given high-level scrutiny and public concern on variation in adjusted mortality rates between hospitals. The Francis inquiry and other high-profile cases have prompted hospitals to put into place different strategies in an attempt to reduce excess mortality. However, we do not know enough about which interventions are effective and cost-effective in improving quality and reducing harm. Research is needed which addresses some of the key uncertainties about delivering effective hospital-wide and focused interventions to reduce avoidable mortality.

Further information on the background to this call, including knowledge gaps and relevant research is given in supporting information.

3. Notes to Applicants

The NIHR Health Services and Delivery Research (HS&DR) programme aims to produce rigorous and relevant evidence on the quality, access and organisation of health services, including costs and outcomes in order to improve health and health services. It is focused on research to support decisions by frontline managers and clinical leaders on the appropriateness, quality and cost-effectiveness of care.

The NIHR Health Services and Delivery Research programme is funded by the NIHR, with contributions from NISCHR in Wales, the HSC R&D Division, Public Health Agency in Northern Ireland, and case by case contributions from the CSO in Scotland.

The programme operates two funding streams (this call is under the commissioned workstream); Researcher-led and Commissioned. Researchers in England, Wales and Northern Ireland are eligible to apply for funding from either workstream under this programme. Researchers in Scotland may apply to the researcher-led workstream but are not eligible to respond to the commissioned workstream and should contact the CSO to discuss funding opportunities for healthcare delivery-type research.

4. Application process and timetable

This call for proposals should be read by potential applicants alongside the brief further supporting information and the general guidance from the HS&DR programme on applications.

Should you have any questions or require any further clarification please refer to the NETSCC FAQs at [HS&DR programme - FAQs](#), if the answer to your question cannot be found please email your query to hsdrinfo@soton.ac.uk with the title for the call for proposals as the email header. Applicants should be aware that while every effort will be made to

¹ The HS&DR Programme recently issued a call on 24/7 care, which included a component on organising acute care at nights and weekends to make care safer. Given the importance of this question, we would rather have some overlap between the two calls than risk losing promising studies. However, researchers who applied under the previous call are asked not to submit the same proposal again.

respond to enquiries in a timely fashion, **these should be received at least two weeks before the call closing date.**

The process of commissioning will be in **two stages** and applicants should submit **outline proposals** via the HS&DR website by **1pm** on **17 January 2013**. All proposals will initially be checked for remit and competitiveness². No late proposals will be considered. No paper-based only submissions will be considered.

Applicants will be notified of the outcome of their outline application in **March 2013**.

Shortlisted applicants will be invited to submit a full proposal via the HS&DR website (a link will be sent to shortlisted applicants). Applicants will be notified of the outcome of their full proposal application in **August 2013**. Please note these dates may be subject to change.

5. Transparency agenda

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/>

http://www.ogc.gov.uk/policy_and_standards_framework_transparency.asp

<http://www.contractsfinder.businesslink.gov.uk/>

² '**Non-Competitive**' means that a proposal is not of a *sufficiently high* standard to be taken forward for further assessment in comparison with other proposals received and funded by the HS&DR programme because it has little or no realistic prospect of funding. This may be because of scientific quality, cost, scale/duration, or the makeup of the project team.