Commissioning Brief
13/157 - Research on improving performance and productivity at the clinical microsystem (team) level
Closing date: 15 May 2014

1. Remit of this call: main topic areas identified

This call invites research on performance, productivity and efficiency of clinical teams in all health and care settings.

The driving need in the NHS is to make the best use of existing resources at a time of financial pressure. The most important resource is people. Staff account for more than half of NHS expenditure and more than two thirds of provider costs. Over half of the workforce is clinical and there appears to be substantial variation in what clinical staff do, how they do it and the effect on patients and performance. Although productivity is hard to measure for complex areas of activity like health, national data suggests a levelling off or slight decline in performance in recent years. There is greater pressure on managers to ensure that best use is made of staff and resources to enhance patient care and meet challenging efficiency targets.

Research is needed to understand variation in clinical performance and identify management strategies and ways of working which appear to be effective. This work is focused on the clinical microsystem, which may be a fixed unit, ward or a team of clinicians who come together every time a patient is admitted for a particular condition. This is an area where research appears fruitful, given the existence of pockets of excellence in otherwise poorly performing organisations. Existing research has focused on productivity at the organisational level (hospital, community service or region). Research in this call is targeted at the level below this, focusing on the team, practice, ward, or clinical unit – the clinical microsystem.

Existing research on variation in clinical performance has often been small-scale, without rigorous study design or the ability to generalise to other settings. High quality research is needed which will provide more robust evidence to inform managers on making the most of clinical staff at a time of austerity. For this call we have extended the usual period for developing proposals. **Researchers will have seven months to develop outline proposals. A recorded presentation detailing the scope of the call will be available to view on the website shortly after the call launch and a workshop to assist those working up bids will take place in February 2014 (date and timings Tbc). Further information regarding the workshop will be on our website in due course.** Successful candidates will have further time to develop full applications at the next stage.

Five particular research gaps are highlighted below. Other research which is robust and will generate sound national learning on interventions to improve performance and productivity of clinical microsystems will also be considered. All proposals must have a focus on costs and efficiency, although this is not defined in a narrow, technical sense.

(i) Applying lessons from high-performing clinical teams

Recent evidence has pointed to the importance of the clinical `micro-system' – the team providing direct care to the patient. This may be a permanent team or a temporary `firm' or group of professionals coming together for particular needs, such as services for younger stroke patients. Research in the US on high-performing clinical units provided interesting insights into the black box of the clinical team. Other work in this country has generated rich understanding of what makes for effective teamworking and frontline leadership. Research is now needed to test the application of these lessons to the wider service. This might include well-designed evaluations of initiatives to improve productivity by changes to the microsystem in terms of processes, leadership, culture, systems and ways of working.

(ii) **Assessing changes to skillmix and substitution in clinical teams**

There have been profound shifts in the roles and responsibilities of health and care staff. These include restrictions to junior doctor hours, growing number of nurse practitioners and other new roles, such as physician assistants and higher level support staff, which have shifted boundaries between professionals. An authoritative review of doctor-nurse substitution identified the paucity of high quality evidence on the impact of shifting roles, particularly on costs. Emerging evidence suggests that substitution may provide equivalence in terms of quality of care but does not necessarily generate savings. This needs further exploration, with well-designed studies to examine the impact of role shifting on patient outcomes, cost, workload and behaviour.

(iii) **Evaluating productive ward series**

Many healthcare organisations have been using Productive Ward resources; an improvement approach adopted by the NHS Institute to make better use of nurse time and the hospital ward environment (for instance, changes to medicine rounds and stocktaking). This approach has been extended to other areas, such as operating theatres, community hospitals, mental health wards and general practices. It has been widely used since 2005, with around a third of all hospital wards estimated to have adopted this approach. A descriptive assessment of how this was implemented was published in 2010, but there has been no systematic evaluation of impact to date. There is a particular need for national evaluation of the Productive series, since they have been widely adopted in the NHS. However, other research evaluating similar improvement initiatives aimed at releasing costs or time by clinical staff would be welcome. For instance, a recent study using lean management techniques identified two thirds of `waste' processes in health visiting services in one community area. Such studies are often small-scale and poorly designed. New research is needed with potential for national learning. Robust quasi-experimental study designs may be most appropriate, with attention to identifying appropriate controls and sensitivity to context.

(iv) **Measuring team performance (especially outside hospital)**

Much work has been done by researchers, regulators and policy-makers to describe and compare variation in activity and performance at whole-organisation level. Much of this work has focused on hospitals, as a bounded unit of analysis. But less attention has been paid to measuring performance and productivity outside the hospital. While the last ten years have seen important developments in charting processes of care – for instance through general practice Quality Outcomes Framework measures – or through specialty-specific national clinical audits, these have not always been linked with other intelligence on inputs (costs, staff and facilities), activity and quality of care. Areas like community nursing are poorly served by routine data and little is known about real variation in clinical activity and outcomes. Methodological work to develop and test meaningful measures of clinical performance (derived by and with clinicians) and to understand variation are needed outside hospitals. These are also needed in acute care at a ward or clinical team level. These need to combine rigour with an understanding of the multi-faceted nature of care, recognising the importance of relational as well as task-based activity.

(v) **Evaluating incentives and mechanisms for better management of clinical staff**

Work has been done at a national level evaluating the impact of national incentives and contracts on productivity. However, more research is needed on how managers locally can make better use of current contractual frameworks, such as job planning and appraisal for hospital consultants. This includes a range of financial and other incentives, such as training and education, study leave, status and responsibility. In terms of financial incentives, further work is needed on the effectiveness of particular local or specialty-based incentive schemes at a clinical team or unit level. This should build on existing knowledge, derived from the current important evaluation of incentivised clinical pathways in Advancing Quality in the north western region of England and other pay for performance schemes. Research might also help in developing and testing new methods of workforce planning and deployment of clinical staff in teams. Greater use could be made of evidence and methods from academic human resource and management expertise outside health.

2. Purpose of call

The NHS is facing unprecedented challenges in terms of rising demands, complexity of needs and restricted resources. Every organisation has to do more with less. The key resource for the NHS is its staff, which accounts for the majority of spend. We know that there is great variation in what staff do and how they do it. At the same time, there is limited evidence on what works best and how to learn from high-performing units and teams. The topic of research to understand variation in performance at a team level was identified as a top priority for the HS&DR programme by clinical leaders, service managers, patients, researchers and practitioners at a stakeholder event at the end of 2012.

An earlier call on all aspects of clinical productivity was issued in 2011. This resulted in the funding of projects focused in areas such as community pharmacy and dentistry, with the main unit of analysis being the organisation. Important evidence gaps remain and this call aims to generate new knowledge on performance at a team level to complement existing work. Further information on the background to this call, including what is already known from existing 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

Please ensure you have read the supporting documents and application guidance notes provided to support this call.

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 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 **15 May 2014**. All proposals will initially be checked for remit and competitiveness[1]. 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 July 2014.

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 December 2014. Please note that these dates may be subject to change.

5. Transparency agenda

[1] '***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.

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/