Commissioning Brief
14/47 - Research on workforce implications of moving care out of hospital
Closing date: 15 May 2014 (two stage – outline to full)

1. Remit of this call: main topic areas identified

This call invites research on implications for staff and employers from shifts in the balance of care between hospital and community. The number of acute and general beds have fallen by a third in the last twenty five years, with shorter hospital stays. At the same time, people are living longer with multiple conditions which need active management. Advances in technology mean that some people who previously needed to go to hospital for chemotherapy or dialysis can now be treated in home. There are changes too in who is providing the care – from specialist nurses running heart failure clinics to pharmacists monitoring people on warfarin. The health and care system is now more complex, with a mix of provision from social care, voluntary sector, independent sector as well as health care. There are also important shifts in how staff work, with the need for more flexible working in different teams and a greater reliance on technology.

This is a complex area and there are gaps in existing research. Previous overviews on shifting the balance of care have noted the paucity of evidence relating to workforce and costs. Few existing studies have been able to identify resources needed to set up a large-scale community-based service, with little attention to organisational and employment models and ways of working. Academic management and human resource literature provide theoretical perspectives, from adaptation to resilience, which could usefully be applied to the health and care workforce at a time of change.

Six particular research gaps have been identified, but other studies with a clear workforce focus relating to shifting care will be considered:

- Impact on community-based workforce (and other) of shifting care outside hospital
- Cost-effectiveness of new staffing models, such as single access teams
- Impact of substitutions and new roles relating to shifts in balance of care
- Research around education and training needs for new workforce
- Effective practices for managing a changing health and care workforce
- Technology support and adoption for community-based workforce

(i) Impact on community-based workforce of shifting care outside hospital

Existing reviews have established that the real cost and impact of large-scale shifts of care outside hospital is not known. There are also concerns about the specialist skills needed in the community and how changes affect working practice and patient outcomes. It is also unclear just how much real shift in staffing has taken place, given official statistics which indicate only marginal changes for instance in the proportion of nurses who are community-based over time. Research is needed to measure shifts in staffing patterns (for particular service or care groups) over time and to assess impact on patients, costs and organisation. Mixed methods studies are likely to be needed, which allow for the importance of context. Studies are also needed on the impact on staff themselves, in terms of morale, commitment and job satisfaction. This might include observational research on effects on working lives and professional identity, as well as quantitative measures such as staff engagement or absence rates.

(ii) Cost-effectiveness of new staffing models, such as single access teams

Different staffing and organisational models have emerged in the last ten years to support service directives for more care to be provided out of hospital. These include particular schemes to prevent hospital admission or join up services more effectively. A useful scoping report on the workforce implications on integrating care identified a series of promising `point' models of care. Some of these have not been well evaluated. These include single point of access teams (single team with community assessment nurse to handle all referral and discharge processes 24/7 for complex patients); community-based rapid response teams (multidisciplinary teams managing crises outside

hospital); and ambulatory emergency care services (new services across primary/secondary care interface for certain conditions, like cellulitis, which would otherwise need hospital admission). These are just examples of new workforce interventions which would benefit from robust evaluation, which might include quasi-experimental designs. Where relevant, work might take account of international practice on moving care to the community, such as integrated local teams or nurse-led care in Europe.

(iii) Impact of substitutions and new staff roles relating to shifts outside hospital

Shifts in the balance of care have been accompanied by changes in who is providing the care. This includes role enhancement (expanding the activities of one professional) and substitution of one kind of staff for another. A review of substitution of doctors for nurses in primary care suggested evidence of equivalent outcomes, but not reduced outcome or workload. This and other reviews noted the paucity of high quality studies in this area and lack of evidence on particular staff groups such as allied health professionals. More primary research is needed to examine the cost-effectiveness of particular role substitutions arising from or related to moving care out of hospital. Evaluations are also needed of new roles which are being developed across the interface, such as consultants with population-level responsibilities or community-based geriatricians, and new kinds of generic health and social care roles (such as case managers, community matrons or similar, and personal assistants to support the personalisation agenda in health and social care). These need further assessment in terms of cost-effectiveness and impact on role boundaries, professional practice and patient care.

(iv) Research around education and training needs for new workforce

A shift to community-based services requires new ways of working, with greater dependence on technology for more dispersed services. More generally, a shift in supporting people with complex, chronic conditions requires more planned, preventive, patient-centred care with a focus on personalised care planning and inter-agency work. This has implications for training and developing a future-facing workforce. An agenda for training might include specific technical skills (such as community nurses giving intravenous therapy at home) or transfer of more general skills, such as communication and teamworking. Particular research gaps include studies to evaluate new ways of delivering entry-level training, with a focus on community-based provision. It would also include research to evaluate re-training of existing staff to strengthen skills needed for care outside hospital. Promising models worth evaluation include schemes such as a borough-wide joint specialist training for nurses and social care staff to enhance integrated care working.

(v) Effective practices for managing a changing health and care workforce

Many of the challenges facing health and care workforce reflect wider trends in employment patterns and activity. This includes ageing workforce and shortage areas; flexible ways of working, from rotas and shift management to challenges of providing 24/7 cover; changes in proportion of casual or part-time working and implications for employers and organisations; migrant workforce (in both directions) and other trends in the labour market. While forecasting work is undertaken by the Centre for Workforce Intelligence, more work could be done to identify how human resource management policies and practices in provider trusts are adapting to support new working practices, skill-mix developments, flexible working, interprofessional working, and new forms of inter-organisational collaboration. Studies could borrow from wider management evidence to identify to what extent 'high performance' and 'high reliability' organisational forms and practices could be tailored to health and care settings, at what cost and with what benefits.

(vi) Technology support and adoption for community-based workforce

Shifts in the balance of care generate changes in the way of working and greater reliance on technology. This can range from use of handheld devices for community nurses to record activity and patient information to near-patient testing and diagnostic facilities in specialist outreach clinics. This raises a number of uncertainties in how best to support staff in using new systems (education and training) and what technology is needed by management to coordinate staff levels, work flows, shifts, manage performance and support teamworking in multi-site (or `no site') organisations. Research is needed to help with this complex agenda. Niche evaluations of specific information systems and technologies will not be helpful, given the rapid pace of change and need for general learning. Studies should be undertaken which draw on theoretical models such as actor-network theory (socio-technical

networks) and other existing research on technology adoption – including partial adoption, workarounds and creative uses of technology. This work should generate actionable findings for managers introducing new systems and ways of working.

2. Purpose of call

This topic emerged as a priority for service managers, clinical leaders and patients considering key knowledge gaps for the HS&DR programme.

Research from this call should be of particular interest to practitioners, service leaders, employers and local education and training boards as well as national bodies such as Health Education England, NHS Employers, Skills for Care and Skills for Health.

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 alongside further supporting information and 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 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

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/

[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.