

# Delivering the aims of the Collaborations for Leadership in Applied Health Research and Care: understanding their strategies and contributions

Bryony Soper,<sup>1†</sup> Saba Hinrichs,<sup>2</sup> Samuel Drabble,<sup>2</sup> Ohid Yaqub,<sup>2</sup> Sonja Marjanovic,<sup>2</sup> Stephen Hanney<sup>1</sup> and Ellen Nolte<sup>2\*</sup>

<sup>1</sup>Health Economics Research Group, Brunel University London, Uxbridge, UK

<sup>2</sup>RAND Europe, Cambridge, UK

\*Corresponding author

†Lead author

**Declared competing interests of authors:** none

Published May 2015

DOI: 10.3310/hsdr03250

## Scientific summary

### Delivering the aims of the CLAHRCs

Health Services and Delivery Research 2015; Vol. 3: No. 25

DOI: 10.3310/hsdr03250

NIHR Journals Library [www.journalslibrary.nihr.ac.uk](http://www.journalslibrary.nihr.ac.uk)

# Scientific summary

## Background

In 2008, the National Institute for Health Research (NIHR) in England established nine Collaborations for Leadership in Applied Health Research and Care (CLAHRCs) to develop forward-looking partnerships between universities and local NHS organisations focused on improving patient outcomes through the conduct and application of applied health research. The CLAHRCs had three interlinked functions: conducting high-quality applied health research; supporting the ‘translation’ of research evidence into practice; and increasing the capacity of NHS organisations to engage with and apply research. The remit of the CLAHRCs therefore went beyond the mere translation of research and also involved developing ways of doing applied research that maximise its chances of being useful to the service and of being implemented.

This document reports on one of the four external evaluations of the CLAHRCs initiative that were commissioned in 2009 by the NIHR Health Services and Delivery Research Programme (HSDR). The evaluation adopted a tiered, adaptive and emergent approach that took account of the evolving and changing nature of the context within which CLAHRCs were established and developed, and consisted of three phases. It also incorporated a formative element, with regular feedback to the CLAHRC directors and HSDR. The description of the health and social care system in England provided in this report reflects the arrangements in place in September 2013.

## Objectives

This evaluation explored how effectively the CLAHRCs supported the ‘translation’ of research into patient benefit, and developed ways of doing applied research that maximised its chances of being useful to the service and the capacity of the NHS to respond. It initially sought to answer one overarching and three subsidiary questions:

*Overarching question:* How, and how effectively, do CLAHRCs address the second translation gap?

*Subsidiary questions:*

- i. How, and how effectively, do CLAHRCs support local health research?
- ii. How, and how effectively, do CLAHRCs build local infrastructures to utilise globally and locally generated health research for local patient benefit?
- iii. Does the bringing together of activities for health research and activities for delivering health research benefit both sets of activities?

These questions guided the first phase of the evaluation, during which it became apparent that we could not hope to explore every dimension of the improvement journeys being pursued in detail. Three further questions were therefore identified (in consultation with the nine CLAHRC directors and HSDR) for detailed exploration in the second phase of the evaluation. These were:

1. How does the NHS influence CLAHRCs’ evolution, outcomes and impact (and how does having a CLAHRC influence NHS behaviour)?
2. How are effective multistakeholder and multidisciplinary research and implementation teams for service improvement built: what can we learn from the CLAHRC model, and what mechanisms are being used to enable it?
3. What can we learn from the CLAHRCs that can provide new understanding of how to use research knowledge and evidence to change commissioning and clinical behaviour for patient benefit?

## Methods

Data collection in phase 1 involved analysis of the CLAHRCs' application forms, interviews with senior individuals in all nine CLAHRCs and workshops or meetings with seven CLAHRCs. A targeted review explored the contextual backdrop of research and practice within which the CLAHRCs were operating, and provided information about the barriers, facilitators and success factors that had been identified in previous programmes with similar objectives.

Data collection in phase 2 included a survey, two case studies and associated workshops, validation interviews with all nine CLAHRCs and two document reviews. The survey examined respondents' views about the various CLAHRC interventions, and their thoughts about working practices and the effectiveness and impact of specific CLAHRC activities. The survey was conducted online from October 2011 to January 2012. Six CLAHRCs participated and response rates varied from 28% to 51% of those surveyed across the CLAHRCs. Just over 40% of respondents were NHS-affiliated; 47% worked predominantly in academia. The remainder were patients and other stakeholders.

In-depth case studies were conducted of two CLAHRCs: Cambridgeshire and Peterborough CLAHRC (CLAHRC-CP) and South West Peninsula CLAHRC (PenCLAHRC). The case studies included document reviews, in-depth interviews with staff and affiliated CLAHRC members, and a 1-day workshop with each CLAHRC. Interviewees were identified in consultation with CLAHRCs and approached directly by the evaluation team. Interviews, mostly face to face, were undertaken between February and April 2012 using open-ended questions and a semistructured interview guide. Transcribed interviews were analysed using a uniform data extraction template structured according to the three research questions. Within the two case studies, 29 of the 36 individuals approached agreed to be interviewed (CLAHRC-CP, 12 of 16; PenCLAHRC, 17 of 20).

One-day workshops were used to refine and validate the insights emerging from interviews. Workshop discussions were facilitated by the evaluation team, and followed a structured protocol; discussions were documented by the facilitators. The workshops involved 25 participants in CLAHRC-CP and 14 in PenCLAHRC.

Validation interviews were conducted with the nine CLAHRC directors, senior members of the CLAHRCs affiliated to the NHS (in seven of the nine CLAHRCs) and two representatives from the funder (HSDR). Telephone interviews were conducted during September and October 2012 using open-ended questions and a semistructured interview guide. Transcribed interviews were analysed using qualitative data analysis software (NVivo version 9, QSR International, Burlington, MA, USA).

This data collection was complemented by two document reviews. The first reviewed the wider landscape in which the CLAHRCs are operating in order to place them in context. The second reviewed individual CLAHRC websites and documents provided by CLAHRC managers.

The study was granted ethics approval by Cambridgeshire 4 Research Ethics Committee.

## Results

Two general findings emerged from phase 1. First, the CLAHRCs would not resolve the lack of consensus identified in the literature about the 'best' approach to mobilising knowledge to improve health care, but they did provide an opportunity to look at specific dimensions of the problems and develop a scientific basis for addressing them. Second, the CLAHRCs could not, on their own, bridge what had been called (however inappropriately) the second translation gap, but they could help to bring about system shifts that bring the health and health research systems closer together.

The following findings emerged from phase 2.

### *How the NHS influences CLAHRCs' evolution, outcomes and impact and how having a CLAHRC influences NHS behaviour*

- The CLAHRCs were rooted in local relationships, built on local capacity and expertise, and shared the findings from their research projects across the local area with local NHS providers and commissioners. Their local remit supported the development of collaboration, encouraged responsiveness to local research needs and shaped the separate character of each CLAHRC.
- The CLAHRCs were required to attract matched funding from NHS organisations. This provided opportunities for engaging NHS partners from the outset, attracted NHS resources through direct and 'in kind' contributions, and enhanced NHS influence on the CLAHRCs. However, it also posed challenges; a CLAHRC that relied on matched funding from only one type of NHS organisation could face problems if subsequent health sector restructuring changed the NHS landscape and affected commitment.
- The CLAHRCs demonstrated a clear drive to promote integration and used clinical and managerial knowledge brokers such as 'locality leads', 'diffusion fellows' or 'CLAHRC Associates' to encourage their peers to become involved in research.
- Integration between the NHS and academics helped to develop awareness of the wider systems within which the CLAHRCs operated. There was some evidence that academics were becoming more interested in needs-driven research and that commissioners were seeing the CLAHRCs as a useful source of support. There was growing recognition that sustaining collaboration across sectors as well as within sectors requires iterative and continual engagement between clinicians, academics, NHS commissioners, managers and patients.

### *Building multistakeholder, multidisciplinary research and implementation teams for service improvement*

- Despite initial challenges, the CLAHRCs succeeded in engaging different stakeholder groups (including clinicians, managers, commissioners, academics and others such as people from social services and the public) although some CLAHRCs were less successful with some groups, such as mid-level NHS management, than others.
- There was recognition that getting different stakeholders on board was an incremental and ongoing process, with partnership working and the coproduction of research at the core of promoting and sustaining engagement.
- Responsiveness was identified as a key feature of effective multistakeholder and multidisciplinary working, in particular against the background of a changing health and social care system ('The very responsive CLAHRCs are the more successful CLAHRCs', CLAHRC director 1). It was also recognised that responsive partnership working depends on trusting relationships, and that these require time to build and foster.
- The need (and ability) to experiment was a crucial pre-condition for the CLAHRCs. They needed to take some risks in order to exploit unforeseen opportunities, try out new approaches and learn from failure and success, and adapt their projects and plans accordingly, while maintaining some continuity within the CLAHRC lifespan.

## Using research knowledge and evidence to change commissioning and clinical behaviour for patient benefit

- Academics within the CLAHRCs were exposed to people from other disciplines and other backgrounds, and this helped to broaden mutual understanding of 'implementation' and of other research fields and methodologies. Over time, the NHS focus on producing change in (clinical) practice was seen to be just as important as the academic focus on producing good-quality research.
- Communication with commissioners was supported by the development of a CLAHRC 'brand', which helped to identify CLAHRC products and give them credence. The CLAHRCs were increasingly seen as useful sources of sound evidence to support (and prompt) constructive dialogue between commissioners and providers.
- There were numerous examples of the impact on clinical practice of CLAHRC projects, demonstrating how the CLAHRC way of identifying, generating and disseminating the research evidence needed by the NHS can help to improve clinical practice, and how these improvements can be spread across the service.

## Conclusions

It is increasingly recognised that a linear, basic-to-applied model which assumes that 'gaps' can somehow be 'bridged' does not fully capture the complexities of moving knowledge into action. Models that focus on interactions among people in which knowledge from multiple sources is exchanged and adapted to local circumstances through a collaborative production–synthesis–integration cycle more aptly describe the processes involved. It is this relationship approach that, largely, shaped the CLAHRCs as they were being established.

What characterised the CLAHRCs was their willingness to negotiate and maintain a genuine dialogue among different partners (including clinicians, managers, policy-makers and academics), to listen and be responsive, and to experiment and adapt on the basis of ongoing evaluation and learning in the context of a changing environment. CLAHRCs included NHS decision-makers in research, and researchers in service decision-making; delivered research findings in actionable forms; and began to expand research capacities and change the culture in universities and the NHS. The following factors, *working together*, contributed to these achievements, which has implications for practice:

- a focus on research relevant to the NHS and its patients
- a clearly defined geographical remit, which allowed the CLAHRCs to build on and develop local relationships and research capacities, combined with a wide operational remit
- matched funding, which helped to promote NHS buy-in and allowed scope for adaptability and responsiveness to the needs of the service
- strong leadership and effective collaboration that promoted increased interaction across the research and health systems, using mechanisms such as knowledge brokers, regular cross-CLAHRC knowledge exchange meetings, training and exchange programmes, and user-friendly publications
- an emphasis on experimentation and learning, which allowed the CLAHRCs to explore, seek their own way, take some risks and exploit unforeseen opportunities, while at the same time evaluating these activities so they could learn and adapt.

All the CLAHRCs adopted relationship models. However, as they developed, and as the complexities of the challenges they faced became clearer, it became increasingly obvious that a focus on multidisciplinary relationships was necessary, but not, on its own, sufficient. Attention also had to be paid to the systems within and through which these relationships operated. Increasingly the CLAHRCs in our two case studies adopted a systems perspective that recognises that context is critical, that most problems and interventions are multilevel and complex, and that more emphasis needs to be placed on inter-relationships among

system elements and system rules and how system shift can be achieved. In practice this meant developing programmes that can:

- produce and exploit research that is pragmatic and practical, encourages participation and representativeness, that makes comparisons between real alternatives, collects cost data and assesses multiple outcomes, often using mixed methods
- identify and respond to the challenges and opportunities posed by the various systems (organisational, professional, economic and so on) within which NHS clinicians, managers and commissioners work
- include short-term as well as long-term research and implementation projects and adopt an early focus on 'quick wins'
- consider external validity in the funding, reporting, synthesis and application of research as well as internal validity
- commit to the full and transparent reporting of research findings through effective communications, including user-friendly publications
- clarify, and strengthen, the roles of different players in research, implementation and service improvement.

Overall the CLAHRCs have shown that it is possible to align research spending more closely with health-care spending and provide better support for health-care decision-making. To date, the CLAHRCs have done this on a project-by-project basis. The challenge the second-round CLAHRCs, and the new Academic Health Science Networks (AHSNs), now face is to convert that success into system-wide change.

## Recommendations for research

We have identified the following areas for further research:

1. **Assessing the difference made by a CLAHRC:** the parallel development of AHSNs and the second round of CLAHRCs provides an opportunity to compare areas with both an AHSN and a CLAHRC, and areas with just an AHSN, and explore the counterfactual to understand the extent to which the CLAHRCs are furthering applied health research and its translation into patient benefit.
2. **Understanding implementation:**
  - i. What lessons can be learned from the CLAHRCs about how to balance rigour and relevance in research projects and improve the applicability of the findings?
  - ii. What lessons can be learned from the CLAHRCs about how to tailor implementation of research to different settings while retaining fidelity?
3. **Achieving sustainability and scale-up:**
  - i. What lessons can be learned from the CLAHRCs about the mechanisms through which the use of research evidence is promoted in the NHS?
  - ii. What factors support, and what factors hinder, the sustainability and scale-up of successful implementation projects?
4. **The role of patient and public involvement:** what are the key enablers of and barriers to successful patient and public engagement in research production and implementation in collaborative partnerships such as the CLAHRCs?
5. **The relation between CLAHRCs and NHS commissioners:** have NHS commissioners used CLAHRCs? If so, how and with what results; if not, why not?

## Funding

Funding for this study was provided by the HSDR programme of the NIHR.

# Health Services and Delivery Research

ISSN 2050-4349 (Print)

ISSN 2050-4357 (Online)

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) ([www.publicationethics.org/](http://www.publicationethics.org/)).

Editorial contact: [nihredit@southampton.ac.uk](mailto:nihredit@southampton.ac.uk)

The full HS&DR archive is freely available to view online at [www.journalslibrary.nihr.ac.uk/hsdr](http://www.journalslibrary.nihr.ac.uk/hsdr). Print-on-demand copies can be purchased from the report pages of the NIHR Journals Library website: [www.journalslibrary.nihr.ac.uk](http://www.journalslibrary.nihr.ac.uk)

## Criteria for inclusion in the *Health Services and Delivery Research* journal

Reports are published in *Health Services and Delivery Research* (HS&DR) if (1) they have resulted from work for the HS&DR programme or programmes which preceded the HS&DR programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

## HS&DR programme

The Health Services and Delivery Research (HS&DR) programme, part of the National Institute for Health Research (NIHR), was established to fund a broad range of research. It combines the strengths and contributions of two previous NIHR research programmes: the Health Services Research (HSR) programme and the Service Delivery and Organisation (SDO) programme, which were merged in January 2012.

The HS&DR programme aims to produce rigorous and relevant evidence on the quality, access and organisation of health services including costs and outcomes, as well as research on implementation. The programme will enhance the strategic focus on research that matters to the NHS and is keen to support ambitious evaluative research to improve health services.

For more information about the HS&DR programme please visit the website: <http://www.nets.nihr.ac.uk/programmes/hsdr>

## This report

The research reported in this issue of the journal was funded by the HS&DR programme or one of its preceding programmes as project number 09/1809/1074. The contractual start date was in November 2009. The final report began editorial review in April 2013 and was accepted for publication in July 2014. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HS&DR editors and production house have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the final report document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HS&DR programme or the Department of Health.

**© Queen's Printer and Controller of HMSO 2015. This work was produced by Soper *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health. This issue may be freely reproduced for the purposes of private research and study and extracts (or indeed, the full report) may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.**

Published by the NIHR Journals Library ([www.journalslibrary.nihr.ac.uk](http://www.journalslibrary.nihr.ac.uk)), produced by Prepress Projects Ltd, Perth, Scotland ([www.prepress-projects.co.uk](http://www.prepress-projects.co.uk)).

## **Health Services and Delivery Research Editor-in-Chief**

**Professor Ray Fitzpatrick** Professor of Public Health and Primary Care, University of Oxford, UK

## **NIHR Journals Library Editor-in-Chief**

**Professor Tom Walley** Director, NIHR Evaluation, Trials and Studies and Director of the HTA Programme, UK

## **NIHR Journals Library Editors**

**Professor Ken Stein** Chair of HTA Editorial Board and Professor of Public Health, University of Exeter Medical School, UK

**Professor Andree Le May** Chair of NIHR Journals Library Editorial Group (EME, HS&DR, PGfAR, PHR journals)

**Dr Martin Ashton-Key** Consultant in Public Health Medicine/Consultant Advisor, NETSCC, UK

**Professor Matthias Beck** Chair in Public Sector Management and Subject Leader (Management Group), Queen's University Management School, Queen's University Belfast, UK

**Professor Aileen Clarke** Professor of Public Health and Health Services Research, Warwick Medical School, University of Warwick, UK

**Dr Tessa Crilly** Director, Crystal Blue Consulting Ltd, UK

**Dr Peter Davidson** Director of NETSCC, HTA, UK

**Ms Tara Lamont** Scientific Advisor, NETSCC, UK

**Professor Elaine McColl** Director, Newcastle Clinical Trials Unit, Institute of Health and Society, Newcastle University, UK

**Professor William McGuire** Professor of Child Health, Hull York Medical School, University of York, UK

**Professor Geoffrey Meads** Professor of Health Sciences Research, Faculty of Education, University of Winchester, UK

**Professor John Powell** Consultant Clinical Adviser, National Institute for Health and Care Excellence (NICE), UK

**Professor James Raftery** Professor of Health Technology Assessment, Wessex Institute, Faculty of Medicine, University of Southampton, UK

**Dr Rob Riemsma** Reviews Manager, Kleijnen Systematic Reviews Ltd, UK

**Professor Helen Roberts** Professor of Child Health Research, UCL Institute of Child Health, UK

**Professor Helen Snooks** Professor of Health Services Research, Institute of Life Science, College of Medicine, Swansea University, UK

Please visit the website for a list of members of the NIHR Journals Library Board:  
[www.journalslibrary.nihr.ac.uk/about/editors](http://www.journalslibrary.nihr.ac.uk/about/editors)

**Editorial contact:** [nihredit@southampton.ac.uk](mailto:nihredit@southampton.ac.uk)