

Developing a national mentorship scheme to enhance the contribution of clinical academics to health care

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Abstract

Aim To provide a template for developing a national mentoring scheme to enhance the contribution practitioner researchers can make to the quality of health care in England.

Background The authors describe the background to and organisation of a mentorship scheme to support those awarded National Institute for Health Research (NIHR) fellowships as part of the Clinical Academic Training (CAT) scheme for nurses, midwives and the allied health professionals in England.

Data sources The paper draws on relevant policy documents to explain the development of the NIHR mentorship scheme. It also reviews the literature regarding mentoring in nursing and the health professions.

Review methods The review was conducted systematically using keywords: mentorship, clinical academic careers, research, nursing research, clinical academic careers, evidence, health care. Databases included PubMed, CINAHL and Google Scholar. An integrated approach was adopted.

Discussion Kirkpatrick's (2006) four-level evaluation model provided a framework to evaluate the scheme and explore the role of mentorship in supporting

NIHR fellows. Preliminary findings from baseline and end-of-year evaluations revealed mentees' expectations of mentorship and its effects on their professional development. Developing a career as a clinical academic can be a challenging journey for novice researchers. In addition, there is a vital need to integrate research with clinical practice.

Conclusion Mentoring appears valuable in enabling NIHR fellows to navigate the challenges of demanding clinical roles in England's National Health Service while making a high-level contribution to research. The importance of preparing mentors for their role is well documented in the literature but mentees also need preparation and guidance to manage this important relationship.

Implications for research/practice The evaluation has implications for embedding similar schemes across nursing, midwifery and the allied health professions to promote capacity and leadership in clinical academic careers. This study has uniquely identified the need to support mentees as well as mentors in such programmes to ensure the optimal benefit of the programme reaches all participants.

Keywords Mentorship, clinical academic careers, nursing research, evidence, health care

Introduction

This paper describes the background to and organisation of a mentorship scheme to support those awarded National Institute for Health Research (NIHR) fellowships as part of the Clinical Academic Training (CAT) scheme for nurses, midwives and the

allied health professions in England (Department of Health (DH) 2012). Preliminary findings from an evaluation designed to explore the role of mentorship in supporting NIHR fellows in navigating a pathway through the organisational, professional and personal challenges involved in building

a career that successfully integrates clinical practice and research are presented. The paper provides a template for developing a national mentoring scheme specifically to enhance the contribution practitioner researchers can make to the quality of health care.

The NIHR Mentorship Scheme

Background UK Clinical Research Collaboration (UKCRC) (2007) argued that a career structure for nurses, midwives and allied health professionals mirroring that already in place for doctors and dentists (UKCRC 2005) was needed to develop world-class clinician researchers who could build the evidence base to underpin quality health care. Significantly, the report emphasised that doctors and dentists are not the only healthcare providers (UKCRC 2007).

In 2008, the NIHR and the chief nursing officer (CNO) for England, in collaboration with the Economic and Social Research Council and the Higher Education Funding Council for England, launched the CAT scheme. The chief driver was the growing recognition that research and innovation would make maximum use of existing resources and improve health care by founding it on the most rigorous evidence base. The report (Finch 2009) recognised that excellence in patient care depends on the contribution of nurses and other health professionals and that all their work needs to be based on the best available evidence.

Importantly, UKCRC (2007) asserted that practitioners working in all the healthcare professions must be the ones to make the biggest contribution to creating and using evidence. As Dame Janet Finch, the chair of the UKCRC Subcommittee for Nurses in Clinical Research (Workforce), maintained: 'It must become the norm to combine clinical practice and research' (Finch 2009).

To achieve that vision, there was an urgent need to build research capability and capacity in the nursing and the allied health professions. The primary aim of the CAT programme was therefore to develop a career structure to underpin a world-class research environment and culture across these professions, fully integrated with clinical practice. The training pathway designed to meet this aim included four programmes: master's in research (MRes), master's in clinical research (MClRes), doctorate by research (PhD/DPhil) and two post-doctoral awards: clinical lectureship and senior clinical lectureship. For more details of the programmes, see the NIHR website (www.nihr.ac.uk) or that of the Trainees Co-ordinating Centre (www.nihrtcc.nhs.uk).

There is growing recognition that education alone may not be sufficient to achieve the goal

of building a robust scientific base for nursing and health care, and ensuring this evidence is used directly to improve patient care and public health. Health professionals following a clinical academic pathway are more likely to succeed if they receive additional support and guidance from those who have already proved themselves successful in combining internationally recognised research output, excellence in clinical practice and success in building research capacity in health care (Whitworth 2007, Reid *et al* 2011, Conn 2013). In 2012, the Mentorship for Health Research Training Fellows Scheme (www.healthresearchmentor.org.uk/website) was established in England to support the CAT programme and help to develop more health professionals capable of operating at the highest academic level and able to become the clinical academic leaders of the future. The scheme was supported, following a competitive tendering exercise, for three years with funding from the DH.

The case for mentoring Mentoring is a learning relationship between two people (Garvey *et al* 2009, Parsloe and Wray 2000). It is potentially powerful because it uses social engagement – 'the mentoring relationship' – as an instrument for learning. Many authors have argued that learning is a social activity (Rogers 1969, Argyris and Schön 1978, Mezirow 1997) involving active engagement (Rogers 1983) and integration of experience with theoretical knowledge. Critical reflection enables analysis and evaluation of experiences to achieve meaningful learning (Boud *et al* 1985, Jarvis and Gibson 1997, Jarvis 2010), with conversation central to this process (Mezirow 1997).

In mentoring relationships, mentors listen, question, challenge and support their mentees to explore their own experiences and aspirations in depth, develop fresh perspectives and new understandings, and engage in meaningful planning of actions (Alred and Garvey 2010). Importantly, mentoring enables the experience, expertise and wisdom of those more advanced in their careers to be shared with those starting out on the pathway.

In the NIHR mentorship scheme, nationally and internationally recognised leaders in the field of health and research were recruited. These are individuals who have demonstrated sustained success in navigating the territory between research and practice, and are able to support the fellows steering their own paths through the complexities of combining a research career with clinical practice.

The evidence base for mentoring Mentorship has a strong tradition in nursing and healthcare in the UK (Andrews and Wallis 1999, Nursing and

Midwifery Council (NMC) 2004, Royal College of Nursing (RCN) 2007, NMC 2008). However, much of the literature concerns the supervision of students in clinical practice (Jokelainen *et al* 2011), or the support of newly qualified practitioners (Duchscher 2008) or of those entering a specialist area of practice (Fawcett 2002, Rosser and King 2003, McCloughen and O'Brien 2005). A search of the literature using CINAHL, PubMed, Open Grey and Google Scholar revealed few accounts of mentorship for senior professional leaders and researchers.

The need for research mentorship in nursing and non-medical healthcare professionals in the UK has largely been met by volunteers from professional organisations, such as the Academy of Nursing, Midwifery and Health Visiting Research (ANMHVR) and the Allied Health Professions Research Network (AHPRN). However, the need for more support for novice researchers is increasingly recognised in the UK and internationally (Byrne and Keefe 2002, Paul *et al* 2002, Kayama *et al* 2013).

Medical practitioners appear to have had more opportunities to receive mentoring to support their clinical academic careers (Sambunjak *et al* 2006, Reid *et al* 2011, Kashiwagi *et al* 2013). The Academy of Medical Sciences offers an established UK-wide mentorship scheme that aims to support young medical researchers in becoming future leaders and innovators in health research, while the London Deanery is now offering a mentorship scheme across the capital. The need to extend mentoring support and underpin the emerging clinical academic careers of non-medical health professionals is now widely acknowledged.

While mentorship schemes are becoming recognised as a valuable way to support emerging professional leaders and researchers, the evidence to support claims for their value is weak (Allen *et al* 2004, Sambunjak 2006, Allen *et al* 2008), and it is unclear which factors are most significant in influencing a successful mentoring relationship and how to assess the effects of mentoring on measurable outcomes, such as career development and research profile (Allen *et al* 2004, Reid *et al* 2011). Qualitative studies have pointed to certain characteristics of the mentor-mentee relationship as being crucial (Gray and Smith 2000, Fawcett 2002, Jackson *et al* 2003, Kayama *et al* 2013) and to the value of sector knowledge and an understanding of the challenges faced as being significant (Passmore 2007).

Scheme aims and content The overall aim of the NIHR mentorship scheme is to provide high quality

mentorship to support the next generation of clinical academic leaders. Activities offered by the scheme are shown in Box 1.

Scheme organisation The NIHR Mentorship Scheme is funded by the DH, supported by the CNO for England and provided by a partnership of organisations concerned with supporting excellence in health research and practice (Box 2). A management team with representatives from each of the partner organisations is responsible for achieving the aims of the scheme and ensuring it is well designed and operating effectively to meet the needs of mentees, mentors and the CAT programme. A steering group, drawn from key figures in health research, clinical leadership and mentorship, works with the management team to provide strategic direction and expertise to assure the quality, relevance and value of the scheme. The scheme is managed by a co-ordinator (GB) with support from an administrator (LR).

Mentors The scheme mentors are senior healthcare scientists, academics and professional leaders with a range of experience nationally and internationally. They bring essential and unique sector knowledge and understanding of the leadership challenges

Box 1 Support activities offered by the NIHR mentorship scheme

- A faculty of mentors who are nationally and internationally recognised leaders in the field of health research, and who have demonstrated sustained success in linking research and practice.
- Individual mentoring support for post-doctoral senior clinical lecturers, clinical lecturers and healthcare scientists.
- Group and peer support to clinical doctoral research fellows and masters research fellows.
- Face-to-face and online mentorship preparation.
- A programme of online webinars.
- Outreach activities including an annual school and regional and professional networks.

Box 2 Partner organisations providing the NIHR mentorship scheme

- The Academy of Nursing, Midwifery and Health Visiting Research (UK).
- The University of Hertfordshire.
- The Allied Health Professions Research Network.
- Imperial College London.
- Imperial College Healthcare NHS Trust.
- The University of Huddersfield.

that clinical academic researchers from nursing, midwifery and the allied health professions face. Mentors apply and are appointed to the scheme, using predetermined criteria for selection (Box 3), by a panel drawn from the management team.

Mentors participate in a one-day interactive preparation programme designed to develop their skills in building an effective mentoring relationship, help them deal with professional and ethical issues that may arise in mentoring, promote consistency of practice across the scheme, and start to build a community of mentoring practice in health research.

Mentees Individual mentorship is available for all NIHR-funded post-doctoral senior clinical lecturers and clinical lecturers.

Recruitment and matching All eligible NIHR fellows are contacted and invited to enrol for mentoring in the scheme. Once enrolled, mentees nominate three 'candidate' mentors from the scheme faculty. Mentees are encouraged to choose mentors who possess skills and experience that may otherwise be unavailable to them: for example, knowledge of specific research methods, or a relevant professional profile or clinical experience. Mentors can belong to professional disciplines different from their mentees', which can bring alternative perspective and insight.

Mentees are provisionally matched with one of their nominated mentors but to ensure both parties feel able to work together, an initial conversation is brokered. This ensures that the mentors and mentees have realistic expectations and mutual respect, and can initiate an agreement about how the relationship will be managed. Following their initial meeting, both parties are invited to confirm they are happy to proceed with the relationship.

Box 3 Criteria for NIHR mentors

- Recognised leadership in the field of health and research that demonstrates sustained success in linking the territory between research and practice.
- A professional portfolio that demonstrates significant track record in competitive grant capture, scientific publication and capacity-building in health research.
- Experience of interdisciplinary working and an appreciation of the different ways of working in professions.
- In a position where they are active in leading and developing research across the academic divide.
- Enthusiastic about developing the potential of others.

Working together Mentees and mentors negotiate their own ways of working, communicating face-to-face or using the telephone, email or voice-over-internet technology such as Skype. Mentees are encouraged to take the lead in terms of identifying personal goals and aspirations that their mentors can help them to work towards. Mentors can assist by encouraging and challenging, signposting opportunities and resources, and sharing wisdom and expertise. However, mentors do not act directly on behalf of mentees or collaborate with them on papers or grant applications. In the best mentoring relationships, mentors also feel they are benefiting from the experience; perhaps by making a contribution to the development of their profession or fostering the next generation of clinical researchers.

Scheme evaluation

When designing the NIHR mentorship scheme, it was important to embed an evaluation design from the outset that was flexible enough to provide understanding of the complex and dynamic nature of mentoring and its impact on individuals' careers, as well as to capture how mentorship supports research productivity and promotes clinical and academic excellence. Kirkpatrick's (2006) four-level model was used as a framework to explore the impact of the programme (Box 4).

This paper is based on the preliminary findings from the 20 post-doctoral fellows who joined the scheme at its inception and were invited to complete a baseline and year-one evaluation questionnaires and interviews.

Expectations of mentoring On joining the scheme, all mentees ($n=20$) were invited to complete a questionnaire to collect baseline data about their aims and expectations of mentoring. Most ($n=15$) identified improving their clinical academic leadership skills as their main goal. As mentee 16 explained, 'I am keen to gain support, guidance and inspiration from an established and experienced

Box 4 Kirkpatrick's four-level model of evaluation

- Level 1: Evaluation of reaction (for example, response to training, facilitators or learning resources).
- Level 2: Evaluation of learning (for example, changes in knowledge, skill and attitudes).
- Level 3: Evaluation in behaviour (for example, changes in practice).
- Level 4: Evaluation of results (for example, measurable outcomes such as publications and grants awarded).

clinical academic/research lead. This opportunity would be invaluable to enable me to discover how they developed their role, and how their current position is impacting on patient care today. The key issues that I would particularly like to focus on during my mentorship experience include: help in developing a focused personal and professional development plan to manage the transition from post doc/clinician to clinical academic leader; advice and guidance on mapping and realising a clear career pathway to extend beyond the duration of the award; and to make use of an objective role model to provide critical opinion on matters as they arise and ensure my work remains patient focused and relevant'.

Developing skills in applying for research grants was another commonly expressed aim, with 14 mentees identifying this as a goal. Building a sustainable research career, for these post-doctoral research fellows, is dependent on successful grant capture. As mentee 5 commented, the 'legacy' she sought from the scheme was to understand, 'How can I sustain research grant funding after my award has finished? How do I manage to establish other nursing research posts within my team, in order that I can establish a nursing research unit?' Broadly, mentees sought mentors who would challenge their thinking and support them in their personal professional development. As mentee 11 explained, 'I feel I would be assisted by some further input from someone with perhaps a broader NIHR outlook. This would help identify opportunities for me to develop. Further I would benefit from constructive critical challenge and appraisal of the direction of my development'.

There was recognition that pursuing a clinical academic career in England was not without challenges and that tensions exist between the demands of clinical practice and those of academic scholarship, particularly where they are the pioneers with no clearly defined career path to follow.

End-of-year evaluation Evaluation of the first year has just been completed. Based on responses from nine mentees, all but one had at least one face-to-face meeting with their mentors and four had met their mentors on four subsequent occasions each. Most indicated their mentoring conversations lasted between one and two hours. Mentees reported that their discussions with mentors focused on career direction, professional development, grant applications, publications and managing workload – particularly managing the 'politics of working between the NHS and the university' [mentee 2]. What seemed most valued was being able to talk to someone more experienced, who understood their situations and

could offer suggestions and fresh perspectives.

As mentee 1 explained, 'The mentor trying to understand my situation and offering different suggestions that I would not have considered myself'.

The majority of mentees (seven) reported that mentoring had helped them to become better clinical academic leaders – the item rated as most important by mentees when joining the scheme. Mentees were positive about how mentoring had helped them have a greater knowledge of career opportunities ($n=8$) and to feel more able to reach the next stage of their career ($n=8$). Mentoring had also helped mentees achieve professional goals ($n=6$) and make a better contribution to their organisations ($n=6$). Four mentees reported mentorship had helped them to enhance their national and/or international profiles but only one said that mentoring had helped them to secure more research funding. This may reflect their stage in the award.

Evaluation also revealed useful insights into how the NIHR mentorship scheme could be improved. Mentees reported that it would have been helpful to receive preparation for the role, so they knew what to expect and how to make best use of their mentoring relationships – presently, mentors are prepared for the role, while mentees receive written guidance.

Discussion

Developing a career as a clinical academic can be a challenging journey for novice and more experienced researchers. Combining high-calibre research with a demanding clinical role can be harder still. Yet the need for health professionals to effectively integrate research evidence into practice is vital (Finch 2009). The NIHR CAT pathway has been a crucial milestone in creating a critical mass of non-medical health professionals with the expertise to significantly enhance the effect of research on health care. The NIHR mentorship scheme would seem to be playing a role in enabling this cohort of research fellows to make the most of their endeavours.

Fellows found mentoring invaluable, particularly in understanding how to navigate the challenges of demanding clinical roles in the NHS while making a high-level contribution to research. Clinical academic careers are a new development in England and few healthcare organisations have experience of supporting such roles in nursing, midwifery and the allied health professions. It is often incumbent on individual fellows to define and establish their roles in complex organisations. Having someone experienced who understands their situation and is willing to offer guidance, fresh perspectives and encouragement appears to be invaluable.

Preparation for the role of mentor has been recognised as essential to its effectiveness (Megginson and Clutterbuck 2005, Megginson and Clutterbuck 2009). Our evaluation reveals that mentees also need preparation so they understand what to expect from the relationship, how mentorship differs from other support such as supervision, how to negotiate a working alliance with their mentors and how to use the relationship most productively. In future, the scheme will support individual mentorship with a series of interactive webinars to enhance the skills and confidence of mentees and mentors in getting maximum benefit from this important relationship.

Most mentorship schemes in health care are local and designed for pre-registration students (Andrews and Wallis 1999, NMC 2008) and novice practitioners

(McCloughen and O'Brien 2005, Duchscher 2008). Evaluation of the NIHR mentorship scheme suggests that a formalised approach is useful in promoting clinical academic careers. Mentorship may also be of benefit to other novice researchers and clinical leaders.

A broader aim of the scheme is to promote mentorship for health research by linking with existing networks, such as the ANMHVR, the AHPRN and the Society for Academic Primary Care. Researchers in England may find it useful to seek mentorship from one of these bodies or find mentors in their professional networks; experienced researchers may consider offering mentorship to aspiring researchers and clinical leaders. A growing body of research suggests the benefit to individuals, professions, evidence and, ultimately, patients may be considerable.

Online archive

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Conflict of interest

None declared

Dedication

This paper is dedicated to Geraldine Byrne who sadly died on October 15 2014

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