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# The medium-term sustainability of organisational innovations in the National Health Service

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**The medium-term sustainability of organisational innovations in the National Health Service**

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## Summary

There is a growing recognition of the importance of introducing new ways of working into the National Health Service (NHS), in order to ensure that patient care is provided as effectively and efficiently as possible. Policy documents such as Lord Darzi's Next Stage Review of the NHS emphasise that improvements in the quality of NHS provision will derive from initiatives led locally by clinicians. Researchers have examined the challenges of introducing new ways of working—'organisational innovations'—into complex organisations such as the NHS, and this has given rise to a much better understanding of how this takes place—and why seemingly good ideas do not always end up in changes in practice. However, there has been considerably less research on the medium- and longer-term outcomes for organisational innovations, and the question of how new ways of working, introduced by frontline clinicians and managers, are sustained and become established in day-to-day NHS practice. Clearly this question of sustainability is crucial if the gains to patient care that derive from organisational innovations are to be maintained, rather than lost to what the NHS Institute has called the 'improvement-evaporation effect'. The project will address this question, by following up a prior study carried out by the project team which looked at the introduction of organisational innovations in NHS genetics service provision.
The study will involve research in four case-study sites around England, each of which was

successful in sustaining its new model of service provision beyond an initial period of pilot funding for new genetics services provided by the Department of Health. Building on findings relating to the introduction and sustainability of these services already gained from the earlier study, the research will use qualitative methods—in-depth interviews, observation of key meetings, and analysis of relevant documents—to understand the longer-term challenges involved in each case and how these were surmounted. The research will provide lessons for those seeking to sustain their own organisational innovations in wideranging clinical areas, and for those designing the systems and organisations that make up the NHS, to make them more receptive contexts for the sustaining of innovation.

Through comparison and contrast across four sites, each involving different organisational innovations, different forms of leadership, and different organisational contexts to contend with, the findings of the study will have wide relevance. The research will produce outputs that are useful for managers and clinicians responsible for organisational innovation, policymakers and senior managers, and academics. Besides outputs including a report for the SDO and peer-reviewed journal articles, the investigators will seek to contribute to the development of capacity among the NHS management and clinical community in a number of ways. Through various established associations with practice-facing organisations (Collaborations for Leadership in Applied Health Research and Care (CLAHRCs); Macmillan Cancer Support, a third-sector organisation concerned especially with promoting and facilitating organisational development around NHS cancer provision; and the NHS National Genetics Education and Development Centre), they will work closely with practitioners within and beyond genetics provision to build their skills directly, and to develop outputs that are useful to personnel across the NHS.

## Background

There is a growing evidence base on the challenges of introducing new ways of working into complex organisational environments such as the NHS. This evidence base covers the difficulties of achieving changes in professional bureaucracies infused with powerful institutional forces, and the interventions that can be developed in order to increase the likelihood that such changes are accepted by the diverse stakeholder groups who will determine success or failure. However, there is considerably less knowledge of what happens after the initial ‘push’ for adoption of an organisational innovation of this kind has ended. In the short-term, a new way of working may be developed, put into practice and made to work, but what happens after the immediate campaign to introduce organisational change—for example, a policy mandate, a campaign to convince stakeholders of the worth of change, or short-term pump-priming money—ceases? This study will build on the existing literature on the uptake of new ways of working in the NHS, and on the emergent literature on the medium- and longer-term maintenance of these new ways of working, to produce new knowledge about what helps and hinders sustainability of such organisational innovations.

The existing literatures on change management, diffusion of organisational innovations and public policy and management provide important lessons on the nature of the challenges relating to instituting, sustaining and spreading change in the NHS and other complex public-service organisations. Recent literature in these fields has diverged from traditional models of the uptake and diffusion of innovations to be found in accounts such as that of Rogers (1995). Increasingly, this literature emphasises instead that “the dissemination of innovations is not necessarily a linear process,” but one in which “rational, institutional and political forces” are implicated (Denis et al., 2002: 61). There is an increasing recognition of the importance of the complex nature of the public-service environment (e.g. Bate, 2000), as well as of the fact that organisational innovations are rarely so simple that they can be implemented without implications for wider practices, care pathways and professional jurisdictions (e.g. Fitzgerald et al., 2002). The implementation of such organisational innovations in public-service professional

bureaucracies such as the NHS is thus a much more "messy, dynamic, and fluid" (Dopson et al., 2002: 37) process than the linear 'S-curve' of innovation diffusion would suggest.

This has important implications for those seeking to introduce, replicate and sustain change in the NHS. New ways of providing services will not translate simply into practice, even if backed by a substantial evidence base. Rather, they are likely to require considerable negotiation and political action. There is a growing evidence base on the kinds of interventions that can encourage uptake of organisational innovations, such as leadership distributed across the professional groups affected by change (Buchanan et al. 2007; Neath, 2007; Martin et al., 2009a), efforts to align innovations with wider group interests and policy pressures (Martin et al., 2007), and pursuing uptake as a process of *adaptation* to local need and context rather than simple *adoption* of a potentially inappropriate innovation (Fitzgerald et al., 2002). Uptake is also more likely where certain contextual conditions are in place, such as strong inter-professional and inter-organisational networks, and a receptive organisational culture (Ferlie et al., 2005; Jones, 2007). Some aspects of Pettigrew et al.'s (1992) model of a receptive context for organisational change might also be seen as applying to 'bottom-up' organisational innovations led from frontline clinicians and managers, with its identification of external pressures, skilled leadership, management-clinician relationships, supportive culture, clear policy/strategy, inter-organisational networks, clear priorities, and fit between the change agenda and the organisation. These kinds of active interventions and contextual conditions are all the more crucial to the chances of change where organisational innovations emerge from the 'bottom up', led by individual clinicians or managers with 'good ideas' rather than driven by policymakers or by powerful organisations such as NICE (Martin et al., 2009a, 2009b).

These factors are likely also to be important in work aimed at sustaining organisational innovations which have been successfully introduced. Some (for example, a supportive organisational culture) are likely to come into play earlier on in the introduction of an organisational innovation, whereas others are likely to be more important in sustaining, maintaining and routinising change (e.g. inter-organisational relationships). However, there may also be further, divergent factors involved in ongoing sustainability of change. Through time, initial favourable conditions become less important, and the question becomes one of how far "this innovation has the capacity to continue to adapt to current and foreseeable system conditions" (Sibthorpe et al., 2005: S79). To date, however, there has been little research on the question of the medium- and longer-term sustainability of organisational innovations. As Fitzgerald and Buchanan (2007: 236-7) note, "in most studies of change, the focus has been with the 'front end', with initiation, resistance, and implementation," with little attention to "the process of change over a longer time frame." In their SDO-funded systematic review of innovation in service organisations, Greenhalgh et al. (2004: 314) similarly found evidence to be "very sparse," with a "near absence of studies focusing primarily on the sustainability of complex service innovations."

Thus there is a need for more research on how to mitigate the 'improvement-evaporation effect', as the NHS Institute (2007) has termed it, and in particular on the factors associated with successful sustainability and routinisation of organisational innovations (May et al., 2007; Sibthorpe et al., 2005). In particular, what strategies—including but not limited to those outlined above—are required in establishing change that is robust enough to survive and thrive in a competitive NHS environment subject to changing priorities and finite resources, without the support of top-down push by policymakers? This research seeks to provide answers to these questions by following four more-or-less 'bottom-up' organisational innovations from a previous study carried out by the applicants. These innovations, each providing clinical-genetics services in a novel way which deviated from established practice in the field, were each initially successful in instituting new ways of working, obtaining follow-up funding after initial pilot money ceased. Having tracked them during the process of establishing their innovative ways of

working and sustaining these in the short term through local funding in the previous evaluation, this research follows them through their medium-term efforts at consolidating change and ensuring their ongoing viability.

## Aims of the study

### Research question

What helps and hinders the medium-term sustainability of micro- and meso-level organisational innovations in the National Health Service (NHS)?

### Aims and objectives

- To carry out qualitative, comparative case-study research in four sites in which a novel way of delivering genetics services has been sustained in the period following pilot funding from the Department of Health, and to combine this with secondary analysis of data previously collected in these sites as part of an evaluation of genetics service initiatives.

- To use this work to develop theoretically informed, generalisable knowledge about the facilitators and barriers in the sustaining and establishment of innovative approaches to service delivery and organisation in the medium-term period following initial introduction. As well as contributing to the academic evidence base, these lessons will be of use to NHS policymakers, managers and clinicians involved in creating receptive contexts and acting effectively to support the ongoing survival and development of novel ways of delivering services, beyond initial funding decisions.

- To disseminate these findings through various means, including via NIHR Collaborations for Leadership in Applied Health Research and Care (CLAHRCs), to reach researchers and practitioners involved in the translation of new ways of working into routine NHS practice, via partnerships with Macmillan Cancer Support and the NHS Genetics Education and Development Centre to reach practitioners involved in developing new services in these fields, and through peer-reviewed publications targeting the academic community.

## Methods

This study consists of a follow-up study that builds on a recently completed (autumn 2008) evaluation of new approaches to providing genetics services in the NHS. The original evaluation was a qualitative, longitudinal study which examined 11 theoretically sampled cases of organisational innovation in the provision of genetics services, involving, variously, reconfigured care pathways, alternative settings of care across the primary, secondary and tertiary sectors, and new divisions of responsibility between professions and specialities. This study will involve further research in a subsample of four of the 11 sites, all of which were initially successful in sustaining their work beyond their pilot periods, but which differ in their clinical focus, health-service sector and inter-professional division of labour. By conducting secondary analysis of the original dataset, and then revisiting these sites around 24 months after the initial three years of fieldwork were completed, this comparatively small-scale study will create a rich, longitudinal dataset that allows a nuanced understanding of the medium-term sustainability of these services, taking account of contextual and process differences between the theoretically sampled sites (Eisenhardt, 1989), and understanding contemporary challenges and resolutions in their historical, path-dependent contexts (Pollitt, 2007).

### Design and theoretical/conceptual framework

The research is informed by the empirical and theoretical literature outlined above. While building on traditional notions of innovation adoption, diffusion and sustainability, recent authors have also drawn attention to the deficiencies of linear models of uptake in relation to complex public service organisations and professional bureaucracies such as the NHS (Fitzgerald et al., 2002; Greenhalgh et al., 2004; Ferlie et al., 2005; Buchanan et al., 2007). Instead, these authors emphasise the need to account for complications in the uptake and sustaining of organisational innovations by viewing these as processes of negotiation among multiple interested stakeholder groups (Fitzgerald et al., 2002), and by understanding sustainability in the contexts of organisation, system and history (Pettigrew et al., 1992). In keeping with this framework, the study deploys a theoretical sampling strategy to select four sites from the prior study which converge and differ in respects which (based on the literature and on the contextual understanding developed in the earlier evaluation) are likely to determine the challenges around sustainability, and appropriate responses to these challenges (see 'Sampling' below), giving the research wider relevance across the health service and aiding generalisability (Eisenhardt, 1989; Pawson & Tilley, 1997).

The study aims to understand the challenges faced in sustaining organisational innovation beyond the initial stages of adoption and adaptation which have formed the focus of most prior research (Greenhalgh et al., 2004; Fitzgerald & Buchanan, 2007), and how various factors, relating to (inter alia) the organisational structures of different health-service contexts, the characteristics of the organisational innovation being sustained, and the agency of various influential stakeholders, interact to affect the prospects for the sustainability of the innovation. The study will pay particular attention to the movement from initial sustainability with local money, to the medium-term process of 'embedding' these ways of delivering services in the fabric of the local NHS. As noted above, little research has addressed this question up until now, with most inquiry focused on the 'front end' of service innovation. However, the emergent literature (e.g. Buchanan & Fitzgerald, 2007)—as well as this study and some of the findings it has produced (e.g. Martin et al., 2009a, 2009c)—indicates some of the issues worthy of particular attention. Sibthorpe et al. (2005), for example, suggest that while favourable conditions—e.g. a risk-accepting organisational environment—may be crucial in enabling an innovation to get off the ground, these become less important through time as service move into sustaining initial gains, and so the ability of a service to demonstrate its effectiveness and worth becomes more important—as too does the skill of leaders and teams in generating the maximum political capital from this. Our own research from the earlier evaluation—which covered not just the establishment of the organisational innovations, but also their initial efforts, successful and unsuccessful, in making these sustainable—affirms this suggestion to some extent, highlighting the importance of effective, dispersed leadership in ensuring that a critical mass of powerful actors in the local network of organisations is aware of the advantages of the new model of service delivery (Martin et al., 2009a). However, our findings also indicated that the process may be more cyclical, with the achievement of sustainability requiring ongoing innovation and reinvention to appeal to the divergent criteria used to judge success by different audiences (referring clinicians; general managers; primary care commissioners), at least in the short term (Martin et al., 2009c). In some of our cases, initial sustainability was achieved through the mobilisation of more-or-less informal coalitions of clinicians, managers and service users in support of ongoing funding; others pursued a strategy of alignment with formal organisational priorities to secure the buy-in of senior-level managers and prevent 'improvement evaporation'. As described in more detail below, this study will enable us to revisit these findings—and the way in which different organisational contexts demand different strategies, with varying levels of success—specifically in the light of the emergent literature on sustainability, and to consider them explicitly in addressing the transition from introduction, through initial sustainability through local funding, to the medium- and longer-term

sustainability which secures the place of services as established components of the local health economy.
By employing a comparative case-study approach that covers a breadth of different NHS contexts and stakeholders, the study aims to produce generalisable knowledge about the process of sustainability with practical and theoretical application within and beyond the health service. The overall clinical context of the four case-study sites—genetics—is chosen as typical of other clinical areas which lack the political and popular interest of high-profile priority areas (e.g. cancer treatment or A&E waiting times), and which cannot therefore rely on centrally driven change-management efforts. Instead they require 'bottom-up' agency through the work of frontline clinicians and managers, and while there may be particular lessons of interest to managers of clinical genetics services, the findings will be relevant and generalisable to other areas of NHS provision which are similarly 'politically marginal' to the high-profile priorities and targets which drive much NHS behaviour. The issues faced in sustaining new genetics services, then, are similar to those faced in other relatively marginal areas of NHS provision, and in an NHS faced with severe restraints on budget, the challenges facing such areas in achieving sustainability are likely to become more acute. The cross-sectoral nature of genetics provision makes it an especially suitable site for research of this kind, and the sampling strategy takes in case-study sites from primary, secondary and tertiary care, sites with leaders from multiple professional groups, and sites in which locally developed and more centrally driven innovations are being sustained. Genetics is the common denominator across these sites, which are then sampled according to these key, theoretically informed variables of interest.

| | Organisational innovation based on evidence-based model | Locally designed organisational innovation |
|---|---|---|
| Primary care-based organisational innovation | Case A<br>Clinical speciality: cancer genetics<br>Led by a nurse<br>Commissioned by PCT | Case B<br>General primary care genetics<br>Led by a general practitioner<br>Commissioned by PCT initially, funding currently halted |
| Hospital-based organisational innovation | Case C (tertiary care)<br>Clinical speciality: cancer genetics<br>Led by a consultant clinical geneticist<br>Commissioned by a consortium of PCTs | Case D (secondary care)<br>Other clinical speciality*<br>Jointly led by genetics and mainstream consultants<br>Funded through integration into mainstream service |

*To preserve anonymity, the clinical speciality of this site is not disclosed (since it was one of only a few). It is a lower-profile clinical area than cancer.

## Sampling, setting and context

Four case-study sites from the earlier evaluation have been chosen as sites for this follow-up research. These have been sampled, following the theoretical sampling approach outlined by Eisenhardt (1989) and Yin (1999), on the basis of consistencies and divergences in several characteristics which the literature, and our prior study, suggests are likely to be important in their paths to sustainability: clinical speciality; degree to which the original innovation derived from an evidence-based model; professional affiliation of lead; sector in which organisational innovation located; mode by which initial post-pilot sustainability achieved. Of particular among these characteristics are the sector of the health service in which the innovation is being sustained (primary care versus secondary/tertiary hospital-based settings) (Martin et al., 2009c) and the degree to which the innovation draws on some form of evidence base or is based on a locally designed approach to the reorganisation of care (Greenhalgh et al., 2004). The former will have significant implications for how sustainability might be achieved (in terms of strategies

and choice of funding), while the latter has particular implications for credibility of the organisational innovation with different groups of stakeholders. These variables are therefore given particular prominence in our sampling strategy. The table above gives details of the features of the four sites, and how they embody the characteristics noted above.
Beyond these descriptive characteristics, the four cases differ in their subsequent paths into post-pilot sustainability: while three have continued to enjoy ongoing funding, Case B has since had funding from one source dropped and is seeking to replace this with alternative funding. Leads of all four sites, however, have agreed to involvement in the study, and the challenges faced by Case B in re-establishing itself, having initially seemingly achieved sustainability, will further increase the richness provided by the sample.

## Data collection

The study will repeat those methods used in the prior evaluation, using in-depth interviews with key stakeholders, observations of relevant meetings and documentary analysis. Interview schedules will be developed in the course of the review of the existing literature and secondary analysis of the prior evaluation's dataset from these four sites; however, they are likely to cover a number of areas, the importance of which is already important from our earlier work in these sites and others, and knowledge of the literature. These include the changing nature of leadership in the sites; the development of the function and remit of the projects through time, especially during the transition from introducing the innovation through adapting it to the changing needs of the local health economy; the audiences whose input and/or approval is crucial to the sustainability of the projects; relationships with commissioners and other influential stakeholders, clinical and non-clinical; the role of service-user involvement in determining need for projects, and securing commitment from budget holders and decision makers. Development of the interview schedules will also draw on expertise and findings from the NHS National Genetics Education and Development Centre's work with service developments funded through the genetics white paper and subsequent initiatives. Participants in the research will include those previously included, plus a wider group of stakeholders with influence on medium-term sustainability (business managers, commissioners, PCT executives etc.). Preliminary discussions with the four case-study sites suggest that numbers of relevant stakeholders involved in the process vary from around five to 10, and so allowing for a degree of 'snowball sampling' through interviews, it is anticipated that around 25-45 interviews will be conducted. Observational work will include meetings relevant to the question of sustainability of the projects, and so the amount of observational work will depend on the number of such meetings taking place during the course of the study. Up to three meetings in each site will be observed, to provide an understanding of current issues and how these are negotiated among the stakeholders involved in the projects. Interview schedules, observation methods and documentary analysis will pay attention to areas considered important in sustainability from the earlier research and the literature (e.g. leadership, policy context, collaboration across boundaries etc., plus the specific areas noted above) but will remain open to issues that emerge through data collection.

## Data analysis

There will be two stages of data analysis. The first stage will involve a secondary analysis of data collected in the four sites in the course of the earlier evaluation. This will involve Martin (who was the lead researcher in the four case-study sites in the earlier evaluation) and the researcher, who will independently return to transcripts from the original study and re-analyse them in terms of challenges and solutions around sustainability, establishment and routinisation. This secondary analysis, along with review of the relevant literature, will help to inform interview schedules, observation and documentary analysis during the fieldwork stage of the

project. Following the fieldwork, the newly collected data will be subjected to analysis led by the researcher but involving input from the whole team, and combined with the findings from the secondary analysis of the data from the earlier evaluation. Given the limited time available in the context of a one-year project, a key issue in ensuring that this analysis is fit for purpose will be balancing a focus on the issues known to be important from earlier work (the extant literature and our own work in this field) with an openness to unexpected findings that 'emerge' from the data. Our approach to achieving this balance will involve using a model adapted from Ritchie and Spencer's (1994) framework approach, which is especially well suited to policy-relevant research. This involves the mapping of the data onto predefined categories pertaining to the research question, in a 'framework' which enables both within-case analysis of how issues relate to one another (e.g. how 'sustainability strategy' relates to sector in which the service is based) and cross-case analysis of these categories. Using this approach will also facilitate an explicitly longitudinal understanding of the data, with data categories subdivided according to point in time at which data collected, permitting a comparative analysis of how these issues have developed and become reframed through time. This approach will, however, be complemented by a more inductive mode of analysis, whereby Martin and the researcher will code data independently of one another in each site, identifying extra categories considered to be of importance to the research question, additional to those predefined on the basis of the literature and the re-analysis of data from the original evaluation. By combining the 'top-down' framework approach with a certain amount of 'bottom-up' (but focused) inductive analysis, the project will make the best use possible of the limited time available to ensure an analysis which takes account of existing knowledge, remains open to new findings in what is still a developing field, and above all is clearly focused on the research question.

## Ethical issues

Whilst the ethical issues faced in policy-oriented, qualitative research are not of the same order as those facing research involving clinical interventions, this is not to say that they can be brushed aside. The ethical and design issues that are of particular importance in this kind of research relate to the need to recognise the ways in which the social relationships relating to the phenomena being studied may impact on the research process, by impeding some participants from fully expressing their views while encouraging others to do so.

A key issue is that participants in this research will be asked to comment frankly on something which may be a core part of their work, as this relates to the actions of other individuals and organizations involved in the process of establishing and sustaining the new services. From the point of view of us as researchers, of good research practice, and of the participants themselves, it is clearly important that those involved are as frank as possible, so that we might get a clear picture of the what has helped and obstructed this process in the particular context of case-study site, with their varied organisational, professional and clinical contexts. If some respondents are franker than others, we may get a very skewed view of this, and of the role of different factors and individuals in the process. This quandary is amplified by the fact that there may well be entrenched power relationships within the groups of individuals being studied, with certain parties exerting considerably more influence than others, which may make those less influential parties more reluctant to be frank.

Awareness of this ethical issue is in itself one thing that will help us to address it. When discussing the research with participants at the recruitment stage, we will emphasise that the views of all involved are equally important, and that we will make every effort to use what they tell us in a non-attributable way. Good research practice in interviewing will also be important, and will be assisted by the experience of those leading and conducting the research. We hope to mitigate any impact of status and power on the substance of what is said in such interviews and meetings by emphasising that our interest is in generalisable themes rather than the specifics of

particular relationships and issues. This should help us to elicit honest accounts that do not favour powerful respondents over weaker ones.

## Project organisation and management

This study will run from December 2011, for one year. It will be led by Dr Graham Martin, Senior Lecturer in Social Science applied to Health at the University of Leicester, who will have overall responsibility for ensuring the timeliness and quality of the project. He will devote 0.25FTE to running the project throughout its course. Other key investigators are Professors Graeme Currie (0.1FTE) and Ruth McDonald (0.05FTE) from the University of Nottingham, and Dr Rachael Finn (0.03FTE) of the University of York. The literature review, fieldwork and analysis will be carried out by a yet-to-be-appointed researcher who will work full-time on the project.

## Timetable and milestones

| Month | Pre | Quarter 1 | | | Quarter 2 | | | Quarter 3 | | | Quarter 4 | | | Post |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| Ethics and R&D approvals | | | | | | | | | | | | | | |
| Literature review | | | | | | | | | | | | | | |
| Reanalysis of findings from earlier evaluation | | | | | | | | | | | | | | |
| Development of interview schedule and other tools | | | | | | | | | | | | | | |
| Fieldwork across four sites | | | | | | | | | | | | | | |
| Analysis of data | | | | | | | | | | | | | | |
| Dissemination within CLAHRC NDL and CLAHRC LNR | | | | | | | | | | | | | | |
| Development of practitioner-oriented outputs | | | | | | | | | | | | | | |
| SDO report writing | | | | | | | | | | | | | | |
| Wider dissemination activities | | | | | | | | | | | | | | |
| Peer-reviewed journal articles | | | | | | | | | | | | | | |

The research will be led by Graham Martin and conducted by a researcher to be appointed in the social science research group at Leicester University's Department of Health Sciences. Months 1-3 will be spent on a preparatory literature review, completion of ethics and R&D applications, and a reanalysis of data from the prior evaluation by the researcher and Martin, with input from other collaborators. Over the following four months (4-7), data collection will take place, and analysis of these data will begin. Analysis will take place over months 6-10.

Dissemination work will begin in month 9, initially involving dissemination via the two East Midlands CLAHRCs, feedback to practitioners, and the development of practitioner-oriented outputs in consultation with CLAHRC practitioners, and then (months 10-12) moving on to preparation of a report for the SDO, and the commencement of peer-reviewed publications. Peer-reviewed publication and wider dissemination activities in partnership with Macmillan and the National Genetics Education and Development Centre will continue beyond the funding of the project. See the Gantt Chart above for more detail.
Leads in all four cases have agreed to involvement in this follow-up study, and to assist with the recruitment of participants. The established relationships of the research team with the case-study service personnel, along with the prior knowledge produced by the earlier evaluation, will aid the completion of this ambitious project within the one-year timescale.

## Outputs

Outputs from the research will initially include dissemination via the two East Midlands CLAHRCs, feedback to practitioners, and the development of practitioner-oriented outputs in consultation with CLAHRC practitioners. At the end of the project, the team will prepare a report for the SDO, and the commence writing for peer-reviewed publications. Peer-reviewed publication and wider dissemination activities in partnership with Macmillan and the National Genetics Education and Development Centre will continue beyond the funding of the project.

## References


Bate, P. 'Changing the culture of a hospital: from hierarchy to networked community'. *Public Administration* 2000; 78: 485-512.

Buchanan, D.A., Addicott, R., Fitzgerald, L., Ferlie, E. and Baeza, J.I. 'Nobody in charge: distributed change agency in healthcare'. *Human Relations* 2007; 60: 1065-1090.

Buchanan, D.A. and Fitzgerald, L. 'Improvement evaporation: why do successful changes decay?' *in* Buchanan, D.A., Fitzgerald, L. and Ketley, D. (eds), *The sustainability and spread of organizational change*. London, Routledge: 2007.

Cooksey, D. , *A review of UK health research funding*, London, HMSO: 2006.

Crilly, T., Jashapara, A. and Ferlie, E. *Research utilisation and knowledge management: a scoping review of the literature (draft)*. London, SDO: 2009.

Currie, G., Finn, R. and Martin, G. 'Spanning boundaries in pursuit of effective knowledge sharing within healthcare networks in the NHS'. *Journal of Health Organization and Management* 2007; 21: 406-417.

Currie, G., Finn, R. and Martin, G. 'Accounting for the "dark side" of new organizational forms: the case of healthcare professionals'. *Human Relations* 2008; 61: 539-564.

Currie, G., Martin, G.P. and Finn, R. 'Professional competition and modernizing the clinical workforce in the NHS'. *Work, Employment & Society* 2009; 23: 267-284.

Currie, G., Finn, R. and Martin, G. 'Role transition and the interaction of relational and social identity: New nursing roles in the NHS'. *Organization Studies* 2010 forthcoming.

Denis, J.L., Hebert, Y., Langley, A., Lozeau, D. and Trottier, L.H. 'Explaining diffusion patterns for complex health care innovations', *Health Care Management Review* 2002; 27: 60-73.

Department of Health. *Best research for best health: a new national research strategy*, London, Department of Health: 2006.

Dopson, S., FitzGerald, L., Ferlie, E., Gabbay, J. and Locock, L. 'No magic targets! Changing clinical practice to become more evidence based'. *Health Care Management Review* 2002; 27: 35-47.

Eisenhardt, K.M. 'Building theories from case study research'. *Academy of Management Review* 1989; 14: 532-550.

Ferlie, E., Fitzgerald, L., Wood, M. and Hawkins, C. 'The nonspread of innovations: the

mediating role of professionals'. *Academy of Management Journal* 2005; 48: 117-134.
Ferlie, E.B. and Shortell, S.M. 'Improving the quality of health care in the United Kingdom and the United States: a framework for change'. *Milbank Quarterly* 2001; 79: 281-315.
Fitzgerald, L. and Buchanan, D.A. 'The sustainability and spread story: theoretical developments', *in* Buchanan, D.A., Fitzgerald, L. and Ketley, D. (eds), *The sustainability and spread of organizational change.* London, Routledge: 2007.
Fitzgerald, L., Ferlie, E. and Buchanan, D. *Managing change and role enactment in the professionalised organisation.* London, SDO: 2006.
Fitzgerald, L., Lillie, C., Ferlie, E., Addicott, R., McGivern, G., Wood, M. and Hawkins, C. 'Interlocking interactions, the diffusion of innovations in health care'. *Human Relations* 2002; 55: 1429-1449.
Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., Kyriakidou, O. 'Diffusion of innovations in service organizations: systematic review and recommendations'. *Milbank Quarterly* 2004; 82: 581-629.
Jones, J.L. 'Sustaining and spreading change: the patient booking case experience', *in* Buchanan, D.A., Fitzgerald, L. and Ketley, D. (eds), *The sustainability and spread of organizational change*. London, Routledge: 2007.
Martin, G.P. Whose health, whose care, whose say? Some comments on public involvement in new NHS commissioning arrangements. *Critical Public Health* 2009; 19: 123-132.
Martin, G.P., Currie, G. and Finn, R. 'Leadership, service reform, and public-service networks: the case of cancer-genetics pilots in the English NHS'. *Journal of Public Administration Research & Theory* 2009a; 19: 769-794.
Martin, G.P., Currie, G. and Finn, R. 'Reconfiguring or reproducing intra-professional boundaries? Specialist expertise, generalist knowledge and the 'modernization' of the medical workforce'. *Social Science & Medicine* 2009b; 68: 1191-1198.
Martin, G.P., Currie, G. and Finn, R. 'Bringing genetics into primary care: findings from a national evaluation of pilots in England'. *Journal of Health Services Research and Policy* 2009c; 14: 204-211.
Martin, G.P., Finn, R. and Currie, G. 'National evaluation of NHS genetics service investments: emerging issues from the cancer genetics pilots'. *Familial Cancer* 2007; 6: 257-263.
Martin, G. and Parry, R. 'Patient and public involvement: one is company, two is a crowd'. *Health Service Journal* 2009; 29 January: 16.
May, C., Finch, T., Mair, F., Ballini, L., Dowrick, C., Eccles, M., Gask, L., MacFarlane, A., Murray, E., Rapley, T., Rogers, A., Treweek, S., Wallace, P., Anderson, G., Burns, J. and Heaven, B. 'Understanding the implementation of complex interventions in health care: the normalization process model'. *BMC Health Services Research* 2007; 7.
Neath, A. 'Layers of leadership: hidden influencers of healthcare', *in* Buchanan, D.A., Fitzgerald, L. and Ketley, D. (eds), *The sustainability and spread of organizational change.* London, Routledge: 2007.
NHS Alliance. *Making trouble for the NHS? Entrepreneurs and innovators in primary care, and the obstacles they face*, London, NHS Alliance: 2007.
NHS Confederation. *Future of leadership*, London, NHS Confederation: 2009.
NHS Institute. *Sustainability and its relationship with spread and adoption*, Coventry, NHS Institute for Innovation and Improvement: 2007.
Pawson, R. and Tilley, N. *Realistic evaluation.* London, Sage: 1997.
Pettigrew, A., Ferlie, E. and McKee, L. *Shaping strategic change.* London, Sage: 1992.
Pollitt, C. 'Hospital performance indicators: how and why neighbours facing similar problems go different ways - building explanations of hospital performance indicator systems in England and the Netherlands', *in* Pollitt, C., van Thiel, S. and Homburg, V. (eds), *New public management in Europe: adaptation and alternatives.* Basingstoke, Palgrave

Macmillan: 2007.
Ritchie, J. and Spencer, J. 'Qualitative data analysis for applied policy research', *in* Bryman, A. and Burgess, R.G. (eds), *Analyzing qualitative data*. London, Routledge: 1994.
Rogers, E.M. *Diffusion of innovations* (Fifth Edition). New York, The Free Press: 2003.
Secretary of State for Health. *High quality care for all: NHS Next Stage Review final report*. London, The Stationery Office: 2008.
Sibthorpe, B.M., Glasgow, N.J. and Wells, R.W. 'Emergent themes in the sustainability of primary health care innovation'. *Medical Journal of Australia* 2005; 183: S77-S80.
Wenger, E.C. and Snyder, W.M. 'Communities of practice: the organizational frontier'. *Harvard Business Review* 2000; 78: 139-145.
Yin, R. 'Enhancing the quality of case studies in health services research'. *Health Services Research* 1999; 34: 1209-1224.

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