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NURSING RESEARCH IN THE NATIONAL HEALTH SERVICE: ACTIVITY, STRATEGIES AND ORGANISATIONAL MODELS

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University of Plymouth

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NURSING RESEARCH IN THE NATIONAL HEALTH SERVICE: ACTIVITY, STRATEGIES AND ORGANISATIONAL MODELS

V. A. WOODWARD

DOCTOR OF PHILOSOPHY

2005
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NURSING RESEARCH IN THE NATIONAL HEALTH SERVICE: ACTIVITY, STRATEGIES AND ORGANISATIONAL MODELS

by

VALERIE ANNE WOODWARD

A thesis submitted to the University of Plymouth in partial fulfilment for the degree of

DOCTOR OF PHILOSOPHY

School of Nursing and Community Studies
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September 2005
ABSTRACT

VALERIE ANNE WOODWARD

NURSING RESEARCH IN THE NATIONAL HEALTH SERVICE: ACTIVITY, STRATEGIES AND ORGANISATIONAL MODELS

In this study, nursing research activity and support for this within the English National Health Service (NHS) were examined. The study was carried out in two phases. The first phase involved working with one acute NHS trust to identify nursing research activity in the trust and to develop its nursing research strategy. The second involved working with five NHS trusts to explore nursing research activity and analyse support for nursing research within these organisations.

The professional, educational and policy-related issues that set the context for the study were examined. The literature review for Phase 1 highlighted the fact that there were few accounts of the development of R&D strategies in the NHS. There were perceived barriers to the utilisation and undertaking of research in clinical settings. The importance and nature of organisational support in achieving an evidence-based culture was highlighted. The literature was further reviewed for Phase 2 and this reported that many changes in policy and local processes for R&D management had occurred during the last decade and showed that these, along with professional developments in nursing, have had an impact on nursing research activity.

The study was a mixed methods investigation. Phase 1 was a survey using a questionnaire to collect data. Phase 2 used an organisational case-study approach. Data were gathered using both quantitative and qualitative methods.

Although the main focus of the work was the role of organisational support for nursing research, what emerged has wider consequences for nursing research and the experiences of the researchers, as many other factors were found that influence nursing research activity in clinical settings. A global model of factors influencing nursing research activity was therefore constructed to account for these findings.

This study has contributed to knowledge about nursing research in clinical settings. It has identified some organisational models of research support for nurses and has provided in-depth accounts of the perceptions of various groups towards nursing research. It has also analysed the perceptions and experiences of nurses undertaking research in the clinical setting. These have been represented in a global model of factors influencing nursing research activity.
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ABBREVIATIONS
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A&E  Accident and emergency
AHP(s)  Allied health profession(s)
AR  Action research
BIDS  Bath Information Data Services
BNI  British Nursing Index
BSc (Hons)  Bachelor of Science (with honours)
CE  Clinical effectiveness
CG  Clinical governance
CH  Community hospital
CHI  Commission for Healthcare Improvement
CINAHL  Cumulative index of nursing and allied health literature
CNS  Clinical nurse specialist
CPN  Community psychiatric nurse
CPNR  Centre for Policy in Nursing Research
CURN  Conduct and utilisation of research in nursing
DGH  District general hospital
DHSS  Department of Health and Social Security
DN  District nurse
DNM  Director of nursing model
DNS  Director of nursing services
DoH  Department of Health
DoMH  Director of mental health
DoN  Director of nursing
DSN  Directorate senior nurse
EBP  Evidence-based practice
ENB  English National Board for nursing, midwifery and health visiting
FACTS  Framework for appropriate care throughout Sheffield
FoNS  Foundation of Nursing Studies
GP  General practitioner
GPN  General practice nurse
GriPP  Getting research into purchasing and practice
HAZ  Health action zone
HCP  Health care professional
HCPs  Health care providers
HDM  Head of development model
HEFC(s)  Higher education funding council(s)
HEFCE  Higher Education Funding Council for England
HEIs  Higher education institutions(s)
HImPs  Health improvement programmes
HOP  Hospital for older persons
HR  Human resources
HV  Health Visitor
ICU  Intensive care unit
IM&T  Information management and technology
IT  Information technology
JAM  Joint appointment model
ABBREVIATIONS (continued)
(Listed alphabetically)

LD     Learning disabilities
LEO    Leading empowered organisations
LP     Lecturer-practitioner
LREC   Local research ethics committee
MH     Mental health
MHT    Mental health trust
MHPT   Mental health partnership trust
MRC    Medical Research Council
MREC   Multi-centre research ethics committee
MP     Multiprofessional
MSc    Master of Science
NC(s)  Nurse consultant(s)
NCCSDO National Coordinating Centre for Service Delivery and Organisation
NeLH   National Electronic Library for Health
NHS    National Health Service
NHSE   National Health Service Executive
NICE   National Institute for Clinical Excellence
NICU   Neonatal intensive care unit
NIHR   National Institute for Health Research
NINR   National Institute for Nursing Research
NKG    Nursing knowledge generation
NMC    Nursing and Midwifery Council
NR     Nursing research
NRC    Nursing research committee
NRCM   Nursing research coordinator model
NRR    National Register of Research
NRU    Nursing research unit
NSF    National Service Framework
PALS   Patient advice and liaison service
PAMs   Professions allied to medicine
PCG    Primary care group
PCT    Primary care trust
PD     Practice development
PDM    Practice development model
PDN    Practice development nurse
PhD    Doctor of Philosophy
PL     Principal lecturer
PNF    Priorities and Needs funding
RAE    Research assessment exercise
RCN    Royal College of Nursing
RCTs   Randomised controlled trials
R&D    Research and development
RDSU   Research and development support unit
REC    Research ethics committee
RG     Research governance
RHA    Regional health authority
RN     Registered Nurse
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<td>RNO</td>
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<td>ROD</td>
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<td>RP</td>
<td>Researcher-practitioner</td>
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<tr>
<td>SDO</td>
<td>Service Delivery and Organisation</td>
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<tr>
<td>SfS</td>
<td>Support for Science</td>
</tr>
<tr>
<td>SH</td>
<td>Special hospital</td>
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<tr>
<td>SL</td>
<td>Senior lecturer</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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<tr>
<td>StLaR</td>
<td>Strategic Learning and Research group</td>
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<tr>
<td>SWOT</td>
<td>Strengths, weaknesses, opportunities and threats</td>
</tr>
<tr>
<td>TH</td>
<td>Teaching hospital</td>
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<tr>
<td>tPCT</td>
<td>Teaching primary care trust</td>
</tr>
<tr>
<td>TTH</td>
<td>Tertiary teaching hospital</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UKCC</td>
<td>United Kingdom Central Council for Nursing Midwifery and Health Care Visiting</td>
</tr>
<tr>
<td>UKCRC</td>
<td>United Kingdom Clinical Research Collaboration</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
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ACKNOWLEDGEMENTS

Phase 1 of this study was undertaken in collaboration with one NHS trust to help them devise a strategy to take nursing research forward for the future, and meet new government guidelines about recording of research activity. Funding for my time came from the Trust, who also provided office accommodation, help and support throughout the life of the project.

Phase 2 of the study was undertaken with the help of five NHS trusts in one region of England; I would like to thank them for their cooperation and participation in this project, and all the staff in these trusts who gave up their time to see me.

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Finally, I would like to thank my family and friends for their encouragement and belief in my ability to complete this work and their continued support and patience over the many years of the study.
At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award without prior agreement of the Graduate Committee.

Phase 1 of this study was financed by and undertaken in collaboration with one NHS trust in England (unnamed to protect confidentiality and anonymity).

A programme of advanced study was undertaken, which included attendance at research seminars and study days, research methods workshops and conferences and relevant Graduate School courses (This was in addition to the University of Plymouth Postgraduate Diploma in Social Research, already held by the author, which is used by the University Faculty of Health and Social Work to prepare students for doctoral level studies.)

Relevant scientific seminars and conferences were regularly attended at local, national and international levels at which work was often presented; two papers were prepared for publication.

**Publications**


**Presentations and Conferences Attended**

**Conference presentations**

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<td>2005</td>
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<td>The experiences and perceptions of primary care nurses undertaking research in the NHS</td>
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<td>2004</td>
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<td>2000</td>
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<td>1999</td>
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**Other conferences attended:**

- 2005 Breast Cancer Care Conference, Royal College of Nursing
- 2003 National Primary Care Conference, University of Hertfordshire
- 2002 RCN International Nursing Research Conference
- 2000 RCN International Nursing Research Conference

**External Contacts**

The author was invited to be a working party member for the Royal College of Nursing for the position paper 'Promoting Excellence through Research and Development' as a result of work undertaken for this degree; this position paper has now been published and further work is being planned by the working party to build on this with interested NHS organisations.

**Word count of main body of thesis:** 79,713 words

Signed: [Signature]

Date: 14th September 2005
INTRODUCTION

Nature of the thesis
This research examined the concept of nursing research within the English National Health Service (NHS). It evaluated nursing research activity in the clinical setting, developed an organisational strategy for nursing research and development (R&D), identified organisational models of support for nursing research (NR) and nurse researchers, and analysed the experiences and perceptions of the nurse researchers themselves. For the purposes of this thesis the term 'nursing research' is used to cover research carried out by practitioners with a Nursing and Midwifery Council [NMC] registration, i.e. nurses, midwives and health visitors/public health specialist nurses.

The research was carried out in two distinct but related phases. The first phase involved working with one acute NHS trust to identify NR activity in the trust and to develop a nursing research strategy with them, in response to the Director of Nursing and Quality contacting the University to request help with this process: the trust had no idea what NR activity was in progress and had no records of completed NR. I worked in the trust on secondment two days a week for one year. In this phase, information was gathered and analysed about NR activity within the trust at that time, in response to government changes in the way research activity was monitored and recorded with the implementation of the Culyer report (Department of Health [DoH] 1994a). Information was then used by the trust both to update their research database and also to develop a NR strategy, via a working party which included membership from clinical practice, academic representation (myself and the University’s Professor of Health Studies) and management.
It was initially planned to follow up this phase with an action research study to implement the strategy, but there was a delay of 12 months before the organisation implemented the strategy. When the delay first occurred it was not known if the work was going to be used, and therefore the second phase of the research was amended.

For the second phase it was decided to examine the state of nursing research activity in other trusts to gain a broader perspective. When undertaking the first phase it was found that there was very little nursing research being done and that support systems were fragmented, and it was decided to analyse the experiences of other NHS organisations in order to gain a wider picture of the state of NR in the clinical setting.

**Significance of the topic and context of the research**

**Phase 1**

When the study was commenced, R&D activity within the NHS had been subject to reorganisation following the NHS R&D strategic framework (DoH 1993a) and the Culyer report (DoH 1994a) and new ways of managing research and allocating funds for research activity had been implemented: these included trusts having a database of all research activity and led to the appointment of R&D directors and managers. Historically, R&D activity had been often *ad hoc* and poorly monitored, being investigator-driven with a lack of strategic direction and coordination: in the main R&D had focused on medical research, due to the university-based education and associated requirements for research that was for many years unique to doctors (Shaw and Clifford 2004).
The Culyer report (DoH 1994a) led to requirement for NHS trusts to monitor and record all research activity on a formal basis, which was in turn linked to the allocation of funds to support R&D activity. For individual trusts, therefore, it was vital to identify all research and the source of funding for that research, in order to be allocated appropriate levels of funding to support it. Trusts also had to take responsibility for all R&D taking place within their boundaries (Shaw and Clifford 2004). These policy changes set the context for the first phase of the research, which can be seen to have been highly important when it was undertaken for the NHS organisation that commissioned the project.

**Phase 2**

The evolution of the evidence-based practice (EBP) movement, first seen with the development of evidence-based medicine (Sackett et al. 1996), has impacted increasingly on healthcare practitioners over the last decade. There is now a firm commitment to an evidence-based NHS (DoH 1996a, 1997a), with the formation of national frameworks to support this, such as a National Register of Research, the Cochrane Centre and database, and the NHS Centre for Reviews and Dissemination (Mulhall and Le May 1999).

The move of nurse education out of hospital training schools and into higher education institutions (HEIs) in the late 1980s and early 1990s has led to a gradual increase in the amount of nursing research being conducted, with increasing numbers of HEIs entering nursing in the Research Assessment Exercise (RAE) (Traynor and Rafferty 1999). Master’s programmes specifically designed for nurses are increasing available.
The advent of new nursing roles has also led to increased opportunities for research participation or leading research; for example nurse consultant (NC) posts were set up by the UK government from the late 1990s onwards (DoH 1999a), and research is therefore a key part of their role.

A focus has now been directed towards research capacity-building in nursing to reflect the growing need for nursing research in the clinical setting (Meyer et al. 2003), with many hospitals beginning to implement strategies that should strengthen and support nursing research capacity (Tanner and Hale 2002a). Closer working partnerships between healthcare providers (HCPs) and HEIs has also been recommended in order to increase the contribution NR can make to healthcare practice.

Finally, the management changes to R&D that started with the Culyer report were further developed during Phase 2 of the study. More recently, the research governance framework (DoH 2001a) has further increased the formal regulation of R&D activity in the NHS with the aim of further raising the standard of research conduct (Shaw and Clifford 2004). This has meant a highly structured approach to R&D management within trusts, with an associated increase in administrative procedures for all NHS researchers.

These professional, educational and policy-related issues set the context for Phase 2 of the study, which was carried out in five NHS organisations in one health region to examine nursing research activity and organisational support against the background of changing healthcare policy, a different educational
background for nurses, and a shift in professional emphasis on what theoretical knowledge bases should provide the basis for appropriate care and treatment decisions.

Choice of location for the research and main features of the organisations
The location for the first phase was a collaborative partnership following a request from the organisation for help. The trust was a large secondary care organisation also offering some tertiary services, and was based in a large industrialised city which at the time had within it the poorest ward in England. The trust employed nearly 1500 qualified nursing staff and was served by one HEI for educational provision for nurses.

Phase 2 involved one health region of England. In order to recruit organisations, a questionnaire was distributed to lead nurses in all the trusts in the region, asking about their NR strategies and whether the organisation would be interested in participating further in the research.

From this, five trusts were selected to take part. They were chosen as they described a variety of different ways in which NR was supported, and also on the basis of the nature of the organisation, in order to obtain information from a variety of healthcare environments.

Research aims and objectives
The aims of Phase 1 were to ascertain nursing research activity and to develop a strategy to promote nursing R&D for one NHS trust. Specific objectives were...
defined, informed by the trust's needs and by the literature that was reviewed.

These were:

- To investigate the amount and type of research activity involving nurses undertaken within the trust.
- To record this activity on the trust's research and development database.
- To identify any potential barriers to utilisation and development of nursing research.
- To explore priority areas for future research.
- To identify educational needs of practitioners.
- To develop a research-based strategy for future nursing R&D.

The aims of Phase 2 of the study were to explore nursing research activity and analyse support for nursing research within five NHS organisations.

Specific objectives were:

- To undertake in-depth profiles of organisational support and the management of nursing research
- To identify organisational models of how nursing research was managed and supported
- To explore whether these organisational models impacted on nursing research activity
- To identify factors influencing NR activity in the clinical setting
- To analyse the perceptions and experiences of nurses undertaking nursing research in the clinical setting
- To consider the impact of findings for nursing knowledge generation
Presentation of the thesis

In view of the two distinct phases of the research, this thesis is presented in two parts. Part 1 reports the research from Phase 1 and Part 2 reports the research from Phase 2. It has been structured this way because the two projects, although related, were distinct entities with separate aims and objectives. Part 2 provides the majority of the data; therefore the word allocation reflects this.
PART 1.

DEVELOPING A NURSING RESEARCH STRATEGY FOR ONE NHS TRUST
CHAPTER 1. LITERATURE REVIEW

Introduction

Phase 1 of the research involved ascertaining nursing research (NR) activity and developing a NR strategy for one NHS trust. In order to plan the research, define the research objectives and inform the study, a brief review of the literature was undertaken as the first activity. Literature found and reviewed at that time is included in this chapter. (Literature is also updated and reviewed in Part 2 of the thesis as relevant to the second phase of the study.)

Methods

Search strategy

A literature search was undertaken using the following sources:

- Computerised databases (MEDLINE, Cumulative Index of Nursing and Allied Health Literature (CINAHL), English National Board (ENB) database).
- Hand searching of nursing, medical and health service management journals and books
- 'Grey' literature such as policy documents, conference proceedings, local project reports
- Citations in papers identified by above searches

The search terms used were: Nursing research and development, research strategies, nursing R&D.

Material included in the review was written in English. Reports in a language other than English were not included due to translation and financial costs, and time restraints of completing the initial review.
Review of the literature

A brief history of nursing research development

The literature demonstrated that nursing research in the UK developed steadily after the 1950s, when Marjorie Simpson was involved in establishing the first forum for nurse researchers in the UK (Hopps 1994). Although Florence Nightingale recognised the need for enquiry, and was a renowned statistician herself, this legacy was not adopted at the time, and it was sociologists and psychologists who started early investigation into nursing and nurses (Hopps 1994). The transition from studies about nurses to studies by nurses proceeded throughout the 1960s and 1970s, with individual pioneering nurses such as Norton and Hockey undertaking NR, and the creation of a Nursing Studies Unit at Edinburgh University in 1971 (Lelean and Clarke 1990). The Report of the Committee on Nursing (Department of Health and Social Security 1972), known as the Briggs Report, stated, "nursing should become a research-based profession" (p108). The government established a NR section in the Department of Health (DoH), and further NR centres were gradually established in other universities.

Policy, educational and professional initiatives

There was a marked increase in the number of higher education institutions (HEIs) offering undergraduate and postgraduate courses for nurses after the late 1980s (Lelean and Clarke 1990) as the introduction of basic nurse education into HEIs at diploma level led to the incorporation of colleges of nursing into higher education. This meant an increase in the availability of degree-level programmes and produced a shift in focus from nurse preparation as vocational training to a research-based education. Academic NR activity increased as more nurse
educators developed their research skills, with a resultant increase in the numbers of HEIs entering the nursing unit of assessment in the Research Assessment Exercise (RAE) (Traynor and Rafferty 1999).

In 1993, a government NR taskforce report (DoH 1993b) identified particular needs for NR, such as:

- addressing the lack of research literacy
- investing in research education and training through training fellowships and post-doctoral fellowships
- identifying an enhanced range of sources and types of funding for research
- improving dissemination and implementation of R&D findings.

The report’s recommendations were designed to enhance research performance and overcome barriers, and it highlighted that NR was disadvantaged and that this should be addressed (Rafferty et al. 2002). However, it concluded that NR should not be funded separately, but should integrate within the overall R&D structure.

Alongside the changes in nurse education and nursing R&D, reorganisation of NHS R&D funding occurred following the report “Supporting Research and Development in the NHS” (DoH 1994a), known as the Culyer Report, and meant that R&D within the NHS was given a higher priority. The main recommendations of this report are shown in Table 1.1.
Key recommendations of the Culyer Report

- Formation of a strategic framework for NHS R&D
- Separation of research from patient care budgets, with the creation of a single R&D budget
- Introduction of systems to encourage and support high quality research
- Access to funding for all parts of the NHS
- Reconstitution of the central R&D committee
- Formation of a national forum to bring together the main funders of R&D in the NHS.

Key to abbreviations: NHS = National Health Service, R&D = research and development

Table 1.1 Recommendations of 'Supporting research and development in the NHS' (The Culyer Report) (DoH1994a)

A national programme for implementing these recommendations saw an R&D levy established on NHS trusts, and they were then allocated their R&D support funds. Funding was determined by bidding, and allocated on the basis of past performance in achieving external non-commercial research monies. In order to achieve funding long-term, therefore, trusts needed to obtain externally-funded research contracts. These are difficult to obtain, with fierce competition often on a national basis. The implications of this for trusts that were trying to establish a research portfolio but lacked a proven "track record" in obtaining grants quickly became apparent. (Funding procedures were amended in March 2000 (DoH 2000b) so that from 2001 trusts no longer had to bid for funds, but had them allocated on the basis of wider criteria including strategic plans, annual R&D reports, information on the National Register of Research (NRR) and from other research funders, and expert advice on NHS R&D priorities.)

Nursing research activity and strategies

Previous research into mapping NR activity and developing nursing R&D strategies was limited in the UK. Articles were found on how individual trusts had approached this, but few developments had a research base. Most had been
devised locally via workshops and audit or by nursing development units, and were based on local needs and the concept of evidence-based practice (Malby 1996, Beasley 1997, Briggs 1997, Jones 1997).

Kitson and Currie (1996) undertook a postal survey involving four district health authorities to elicit information from nurses about R&D activity. Only 141 replies were received. The snowball sampling system was unreliable: copies of the questionnaire were sent to directors of nursing and principals of colleges of nursing, who were asked to cascade them to clinical colleagues. It is extremely difficult to ascertain whether the request for information reached all clinicians. The authors acknowledged these limitations. However, the study's findings of little supervision or support for nurses undertaking R&D activities, and a possible lack of commitment from the organisations, are acknowledged elsewhere as barriers to undertaking research and to the utilisation of existing research: Malby (1996) and Jack and Oldham (1997) noted that a cultural change was needed in organisations to facilitate NR activity.

Bartlett et al. (1997) mapped NR activity retrospectively between 1990 and 1996 in a large acute trust to establish a database of NR. Some data were already held on the Culyer database, but further NR activity was identified via key individuals such as managers, known researchers, and others suggested by the nursing directorate. A total of 90 individuals were contacted, and a questionnaire sent to gather project details. A total of 72 projects were identified but it was recognised that this probably did not reflect the total number over the six-year period. One third of projects received no funding, those that did mostly received internal trust funding with only 7% funded externally. Practice development and evaluation
accounted for 75% of projects, 21% were carried out as part of academic courses. Projects were a mix of design: 49% quantitative, 40% qualitative and 11% mixed methods. Research activity was greater in centres where there was an active research culture and pre-existing medical research programmes. Results were mostly disseminated locally (31%) via reports. Only six projects had been published in national nursing journals, although another six were published in medical journals and four in other journals. Nearly a quarter were only available as university-held dissertations. Researchers also interviewed 15 principal investigators and found nurses often felt isolated, had a lack of time for dissemination and little facilitation or supervision to guide the research or help with publication unless undertaking academic courses. Key recommendations were for a greater central co-ordination and monitoring of NR, increased levels of support for researchers, more opportunities and guidance to improve dissemination and the exploration of the value of models for disseminating and implementing findings into practice. The main limitation of the study was the sampling procedure: this was fragmented and relied on people to forward letters to researchers if they were not principal investigators. The project team also found locating researchers who had left the organisation difficult, and details of some projects were therefore difficult to ascertain.

McMahon and Kitson (1997a, 1997b) undertook research to inform the development of an R&D strategy for the Royal College of Nursing (RCN). Interviews were held with 66 nurses regarded as opinion leaders in research, education, management and practice. However, only 17% of those interviewed were clinicians. The results went straight to the RCN Council, with no mention of a consultative phase with RCN members. The RCN developed a strategy in
response to this study, but evaluation of the proposed strategy is not mentioned by McMahon and Kitson.

Malby (1996) explored some of the ways one Regional Health Authority (RHA) addressed the difficulties facing individual nurses and 'professions allied to medicine' (PAMs; now renamed allied health professions (AHPs)) in developing R&D, and described local initiatives to take this forward after an audit revealed fragmented research that was uncoordinated and not disseminated. The benefits of focusing on specific areas of research, such as tissue viability or infection control are discussed, and collaborating with academic institutions is recommended. Resistance to change by nurses was identified as the main difficulty to overcome. This difficulty was also acknowledged by MacGuire (1990), who viewed the reaction to change as similar to the reaction to grief, and by Hunt (1987), who encountered resistance to change when trying to implement research-based practice with regard to pre-operative fasting. However, Bostrom et al. (1989) found that staff nurses had not developed strong negative attitudes towards research, and were likely to be receptive to education about nursing research. Several factors could account for these differences: Bostrom et al.'s study was undertaken in the USA, where nursing research has been developing within the clinical setting and undertaken by clinicians for some time, as demonstrated by the comparative wealth of literature from the USA found in this search (see for example Lawson 1987, Yeager and Sherman 1988, Hunt and Waudby 1990, Vessey and Campos 1992, Angelucci and Todaro 1993, Green and Houston 1993, Rempusheski et al. 1996). Bostrom et al. (1989) also found differences in responses between nurses with a baccalaureate degree in nursing compared to
nurses without a degree. Those with a degree were more positive, with a large proportion expecting to undertake research as part of their clinical duties.

Organisational support has been recognised as a major factor in achieving the dissemination and utilisation of research findings (Horsley et al. 1978, Closs and Cheater 1994, Hicks 1995a, Knight 1994, Dunham-Taylor et al. 1996, Briggs 1997, Bartlett et al. 1997). Closs and Cheater (1994) conclude that a positive research culture, with interest and support, are needed. Hicks (1995a) found that nurse managers considered being a good researcher fundamentally incompatible with being a good nurse, and concluded that NR will not progress until managers’ attitudes to it change.

Knight et al. (1997) and Martin et al. (1998) describe how one organisation, in partnership with the local university, supported a strategy for developing research in practice. A steering group was set up to address the issues of understanding the research process and utilising research in practice, and to develop joint research initiatives. The approach adopted was an active attempt to effect change in the organisational research culture. It was recommended that a research centre should be set up, but recognised that further expansion was dependent on the ability to attract funding. The strategy did not address the issues of how to incorporate the levels of enthusiasm and commitment shown by the research team into other areas of the trust, and although initial costs were kept low due to collaboration with the university, the longer-term funding implications of setting up a new research centre was not analysed in depth.
This concept of forming a steering group follows the model used by many hospitals in the USA. Developing R&D activity seems to have been addressed in the 1980s and 1990s with the establishment of nursing research committees (NRCs) in many hospitals (Lawson 1987, Yeager and Sherman 1988, Hunt and Waudby 1990, Vessey and Campos 1992, Angelucci and Todaro 1993, Green and Houston 1993, Rempusheski et al. 1996). They were set up to provide support for nurses in their research efforts. Membership included representation from clinical practice, administration and education. Disadvantages of this model include lack of formal structure, with different institutions follow differing pathways; misunderstanding of their role among the nursing research community; members using the NRC as a vehicle for their own personal agendas; and NRCs with a lack of nurse researchers (Vessey and Campos 1992).

Conclusions from the literature review

The literature review clarified the development of Phase 1 of the research by highlighting the fact that, although there were some accounts of the development of R&D strategies in the NHS, few of these were research-based, most were introduced without pilot studies and after little consultation with clinicians, and evaluation was not carried out. The review also revealed perceived barriers to the utilisation and undertaking of research in the clinical setting. The importance and nature of organisational support in achieving an evidence-based culture was highlighted, which informed the planned research. The documentation of experiences of institutions in the USA helped by providing information about the processes of integrating R&D, and providing practical examples of differing approaches. Undertaking the literature search and reviewing the papers enabled the research question to be clarified and specific objectives formulated. It also
provided greater understanding of the complex issues involved and highlighted themes that informed the design of the research.

Chapter 2 will now consider the contribution of the literature review in refining the focus of the research and examine the methodological processes of Phase 1.
CHAPTER 2. METHODOLOGY

Introduction

The literature review assisted in refining the focus, drawing attention to the main areas of significance. In order to achieve the overall aim of developing a strategy to promote nursing R&D, specific objectives were defined, informed by the Trust's needs and by the literature. These were:

- To determine the amount and type of research activity involving nurses and midwives undertaken within the Trust.
- To record this activity on the Trust's research and development database.
- To identify any potential barriers to utilisation and development of NR.
- To determine priority areas for future research.
- To establish educational needs of practitioners.
- To develop a research-based strategy for future nursing R&D.

Selection of the design

A variety of research designs were considered, both qualitative and quantitative. The timescale and nature of the project was considered, and the fact that it was being undertaken single-handed. In order to obtain a comprehensive, accurate database of existing research activity within the Trust, it was necessary to sample all nurses working in the organisation; as the Trust is large, employing many nurses, a survey design was appropriate to gather information (Bowling 1997). Interviews would have taken too long, given the time constraints. Computer software packages were available for designing the questionnaire and for statistical analysis of data. It was therefore decided to undertake a survey using a questionnaire to collect data, in order to sample all nurses working in the Trust in a relatively short timescale.
Limitations of this approach were considered: these include possible poor response rates, socially acceptable responses being provided (Parahoo 1993), and potential difficulty in obtaining an accurate, up-to-date database of nurses employed. However, the advantages of the design, and its suitability in terms of meeting the research objectives, outweighed these potential limitations. A research proposal was written and approved by the Trust's Director of Nursing.

**Funding and approval**

Funding for the project was provided by the Trust, who met all costs for a period of one year. The Director of Nursing gave approval for the project in consultation with the Research and Development Committee.

**Locating the target population**

In order to obtain accurate information about all NR being undertaken in the Trust, it was decided, in consultation with the Director of Nursing, to sample all qualified nurses, midwives and health visitors working for the organisation. If this had not been done, it could have been difficult to identify research-active staff. This could have meant possible omissions in details of NR that would affect future funding bids. The sample was therefore a purposive one (Bowling 1997), and was a census within the organisation. In order to obtain a list of current staff, permission was given for the payroll department's staff database to be used. A copy of this was provided, which gave a list of names of all nursing staff, together with their place of work within the Trust, age and grade. This was used to access the sample.
Designing the fieldwork

Designing the questionnaire

The questionnaire was designed in two sections. The first section was semi-structured, designed for all nurses to complete, and devised using the literature. It ascertained nurses' educational profiles and their educational needs in terms of research, identified possible barriers to research, and gathered some demographic information using closed-ended (forced choice) questions where a range of possible answers was provided (McColl 1993). Participants were also asked to rank items in one question (DePoy and Gitlin 1994) to discover how important particular themes were regarded for future research input. Interest in undertaking research was ascertained.

Designing the profile

The second section of the questionnaire was a research profile; nurses were only asked to complete this if they had undertaken their own research or assisted with other people’s research, giving details of the research to include design, methods, results and outcomes. This used mostly open questions (Parahoo 1993) because detailed information was needed about each project for the Trust’s R&D database. This section was designed using the R&D database template as a format to enable easy transfer of data.

Coding the questionnaires

The questionnaire was designed using a software package (Formic®) that incorporated coding during set-up. It was important for respondents to be identifiable so that non-responders could be given reminders; therefore each
questionnaire was given a four-figure number. To simplify the process of sorting and identifying the two sections of the questionnaire, they were printed on different coloured paper - white for Section 1 (questionnaire), yellow for Section 2 (research profiles).

Ensuring rigour

Validity is the extent to which a measure really measures the concept that it purports to measure (Bryman and Cramer, 1994). Reliability is the extent to which the results obtained from an instrument can be relied upon, that is the extent to which the questionnaire would produce similar results under the same conditions on all occasions (DePoy and Gitlin, 1994).

Content validity was established by refining the focus of the research after the literature review (Eby 1993), and piloting the questionnaire and profile with a small group of academic professionals to validate the knowledge base. Changes were made to one question when the professional group found the wording did not reflect what the question was trying to ascertain.

To establish face validity, health professionals were given pilot questionnaires and profiles to try and reduce omissions in content and avoid misunderstandings of questions, as well as looking at errors in logic and spelling (Eby 1993). A small number of typographical errors were then amended.

Concurrent validity was considered by looking at using tools from the existing literature as a basis for questions (Eby 1993). Unfortunately, due to time and financial restraints it was not possible to send out these tools with this questionnaire. However, results from this study replicated the findings of those using similar tools, thus demonstrating that concurrence had been achieved.
Predictive validity could have been established by following up a group of responders long-term, using their questionnaire responses to predict future research activity. If there were a significant relationship between responses and future research activity, then the questionnaire would have predictive value (Eby 1993). However, this was beyond the scope of the research.

Revisions after piloting included slight rewording of several questions to prevent ambiguity or confusion. The question about importance of topics for future research was changed from a ranked format to a Likert-type scale (Oppenheim 1992) after piloting demonstrated that many respondents had difficulty ranking the importance of these topics.

Limitations
The questionnaire had to be designed in a short space of time, which limited some of the tests of validity and reliability that could be undertaken, for example it was not possible to undertake extensive statistical tests of reliability in the allotted time. The use of a survey approach did not allow for in-depth investigation of individuals' perceptions or experiences of a topic (Parahoo 1993) and response rates can be disappointing (Catanzaro 1988a). Non-response bias can occur with low returns and, in addition, the results may not provide an accurate representation of opinion if only nurses with an interest in the topic area respond (Bowling 1997).

Conclusions
Designing the fieldwork was time-consuming, but relatively straightforward. Literature was used to inform the design, and measures taken to complement the
Trust’s existing database to collect information on research projects. Piloting was undertaken, and one question had to be revised substantially (with a change of measurement from ranking to Likert scales). Rigour was addressed as far as possible within the limits of the study. Constructing the tool was made easier using a specially-designed computer package that incorporated coding ready for statistical analysis.

Implementing the research
The questionnaire was coded and printed. Departments and wards were contacted and visited before distribution to inform them of the project: this acted as an initial contact, and prepared them for the arrival of the questionnaire. Staff were also informed about the project via liaison meetings between nurse managers and ward managers.

A letter was designed to accompany the questionnaire. The information given had to adhere to ethical standards and inform the respondents of the nature of the project. A basic explanation of the study and its importance was given. The use to which results would be put was outlined, and the importance of participation emphasised. Confidentiality was assured; researcher credentials given; the respondents thanked for their help.

The questionnaires were distributed over a one-week period; envelopes were enclosed that were addressed directly to me at my office for return in the hospital’s internal post system. This ensured confidentiality and encouraged return.

Practitioners with a UKCC (the regulatory body at that time) qualification were initially identified from the payroll database supplied by the Finance Department but there were several problems with the distribution as the database had inaccuracies. These problems were identified when delivery of the questionnaires
was attempted, and up-to-date lists of ward staff were then obtained from the wards themselves, and distribution rectified. A total of 1,517 questionnaires were finally distributed. Eighteen were returned of practitioners who had either left or were on maternity leave. This made the total number of questionnaires sent out 1,499. They were delivered direct to wards and departments where possible; for staff based outside the main site, the hospital's courier postal system was used.

Responses

The initial response for Section1 after two weeks was 462. The response was very good from certain areas such as child health, specialist nurses, theatres, day case units, outpatients, and community midwifery. It was particularly poor from many of the acute wards, with several having a response of only one or two.

Reminders were issued to all departments and wards after two weeks, and posters for display with some spare questionnaires were distributed to the acute wards three weeks after initial distribution. The reminders led to 44 more returns, and the posters produced another 23. A total of 529 were available for analysis.

This represented a 35.29% response rate, which was disappointing: some reasons can be postulated for this, such as work pressures on acute wards, perceived relevance of the survey to all practitioners, and the possibility of other inaccuracies to the database. When interpreting the results, it must therefore be remembered that they are not representative of all practitioners within the Trust, and there is a potential source of non-response bias (Bowling 1997). However, others have reported low response rates in similar research. Robinson (1999) reported a less than 10% response to a questionnaire to determine level of interest and
experience in nursing research. McSherry (1997) had a 36.33% response rate in his survey of 765 nurses in one hospital when trying to find out what registered nurses felt and understood about research. Robinson suggested it may be indicative of:

‘either a sense of apathy or helplessness, or simply a lack of confidence’ (p42).

McSherry accounts for the low response rate as due to insufficient time allowed to complete the questionnaires, an ongoing audit that may have lead to pressure on staff and staff being away on leave.

The second section of the questionnaire was distributed to all participants with Section 1, but only those who had undertaken or assisted with research were asked to return them. A total of 72 research profiles were returned from 54 individuals. However, only 62 of these were available for analysis: ten gave little information other than to state that the individuals had assisted medical staff with data collection, but further information about the research project was not given. These profiles were therefore excluded from the analysis.

**Overhauling the data**

Questionnaires were scanned into the Formic® package, and then manually checked for errors, with any free text being added at that time. Missing data were coded as 99 on the spreadsheets for ease of identification. Manual checking took a fair amount of time, as the scanner was not good at reading boxes that were untidily marked by respondents. However, by manually checking every entry, reliability was substantially increased (Polit and Hungler 1991). This took several weeks to achieve.
The software automatically entered the information in spreadsheet form, ready for a basic level of analysis. However, this level was not suitable for this project as inferential statistics were not available, and even frequencies were limited to numbers and percentages, with no calculation of measures of central tendency. For this reason, data were saved onto a computer floppy disc and then converted into a format suitable for the Statistical Package for Social Sciences® (SPSS®) software for analysis. This stage of the research took two weeks to achieve due to technical problems: the information could not initially be opened in SPSS® despite having been saved in an SPSS® format.

The research profiles were overhauled separately by hand. This was easier to achieve as there were far fewer questionnaires. The main problem was with a few returns where handwriting was difficult to decipher. These questionnaires were doubled-checked by the research manager in the trust to enhance accuracy.

Analysing the data

Analysis of Section 1 of the questionnaire used mostly descriptive statistics, with some inferential statistical analysis (Ciegg 1990), and was performed using SPSS®. Section 2 (research profile) was analysed using manifest and latent content analysis (Catanzaro 1988b) and a mixture of qualitative and quantitative data were obtained. The profiles were sorted into two groups: those where nurses had undertaken research themselves (n = 29), and those where they had been assisting others with research (n = 33). Comparisons were then made between groups.
Data were of differing types – mostly nominal, but also some ordinal (Clegg 1990). Data were checked for accuracy via frequency charts. Each question was identified as to the type of data so that appropriate analysis could be performed. Descriptive data were obtained from frequencies, and inferential statistics were used to compare groups or variables within the sample. Nominal data were compared with nominal using cross-tabulation and the Chi squared statistic, or Fisher's Exact Test for responses of less than 5. Ordinal data were compared with nominal data using the Mann-Whitney U test.

Content analysis was used initially to analyse the profiles. The type of research undertaken was initially divided into ten broad themes identified in the literature (Hunt 1997, see page 55) and used in the questionnaire. Analysis by hand divided the research into these themes, with some projects reflecting more than one theme. Statistical comparison by group was then performed after the information was coded and entered onto SPSS®. Descriptive analysis was undertaken using frequencies, followed by inferential statistics looking for differences between the two groups using Chi squared statistics.

Patterns of association were looked for, and statistical significance levels checked. A level of statistical significance was set at \( p = 0.05 \).

**Writing up the results**

An initial report was written up of the results for the Trust as soon as the analysis was completed, and presented to management in July 1998. This enabled the Trust to decide the next step forward, which was to form a steering group to
consider the results and devise a strategy for the future. A presentation was also made at an open meeting for nursing staff. Writing up the research itself was an ongoing process, with the continuation of reading and reviewing relevant literature.
CHAPTER 3. RESULTS

Introduction

The results of the research questionnaire will be presented first, and will consider characteristics of respondents, identified educational needs, perceived barriers to undertaking research, importance of research and interest in undertaking research. The results of the analysis of the research profiles will then be presented.

Research questionnaires

Characteristics of respondents

Age

Seventy percent of respondents were in the 30-49 year age range (see Table 3.1).

<table>
<thead>
<tr>
<th>Age</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30 years</td>
<td>16%</td>
</tr>
<tr>
<td>30-39 years</td>
<td>39%</td>
</tr>
<tr>
<td>40-49 years</td>
<td>31%</td>
</tr>
<tr>
<td>50 years and over</td>
<td>14%</td>
</tr>
</tbody>
</table>

Table 3.1 Age Range

Gender

Most respondents were female; this reflects the fact that there are more women than men in the nursing professions, and approximately matches the national profile: for many years men have constituted less than 10% of the qualified nursing labour force (Hicks 1999) (see Table 3.2).

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>8%</td>
</tr>
<tr>
<td>Female</td>
<td>92%</td>
</tr>
</tbody>
</table>

Table 3.2 Gender distribution
Gender differences were analysed statistically. There were four main areas that were statistically significantly different. More males stated that they were interested in undertaking research than females (58% versus 36%, $\chi^2 = 6.78$ df 2 $p = 0.033$). More females than males saw research into management and organisational issues as important ($\text{Mann-Whitney U} = 7225.0$ 2-tailed $p = 0.016$). There were no males with a midwifery qualification ($\chi^2 = 6.12$ df 1 Fisher's Exact Test: 2-tailed $p = 0.009$), and there was a higher proportion of males with a mental health qualification ($\chi^2 = 12.08$ df 1 Fisher's Exact Test: 2-tailed $p = 0.008$).

**Year of qualification**

Table 3.3 shows the year of qualification of the sample. Again, this reflects the ageing nursing population in the UK: one in five nurses on the UK professional register is aged 50 years or older (Buchan 1999).

<table>
<thead>
<tr>
<th>Year of qualification</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre 1970</td>
<td>12%</td>
</tr>
<tr>
<td>1970-79</td>
<td>27%</td>
</tr>
<tr>
<td>1980-89</td>
<td>39%</td>
</tr>
<tr>
<td>1990-98</td>
<td>22%</td>
</tr>
</tbody>
</table>

Table 3.3 Year of qualification

**Years in post**

Mean time was 5.8 years, median 4 years, mode 1 year.

**Professional registration**

The majority of respondents were Registered Nurses (Adult) (see Table 3.4).
### Table 3.4 Level of registration

<table>
<thead>
<tr>
<th>Level of registration</th>
<th>Percentage (not cumulative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Nurse (Adult)</td>
<td>79%</td>
</tr>
<tr>
<td>Enrolled Nurse (RN Level 2)</td>
<td>27%</td>
</tr>
<tr>
<td>Midwife</td>
<td>13%</td>
</tr>
<tr>
<td>Sick children's nurse</td>
<td>7%</td>
</tr>
<tr>
<td>Mental health nurse</td>
<td>2%</td>
</tr>
<tr>
<td>Learning disability nurse</td>
<td>0.2%</td>
</tr>
<tr>
<td>Health visitor</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

Key to abbreviations: RN = registered nurse

### Academic qualifications

Table 3.5 shows the academic profile of the sample: nearly half (44%) had a diploma-level qualification, but only 14% had a degree.

<table>
<thead>
<tr>
<th>Academic qualification</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>44%</td>
</tr>
<tr>
<td>Degree</td>
<td>14%</td>
</tr>
<tr>
<td>Postgraduate diploma</td>
<td>3%</td>
</tr>
<tr>
<td>Masters degree</td>
<td>3%</td>
</tr>
</tbody>
</table>

### Table 3.5 Academic qualifications

### Post held

The type of post held by respondents is shown in Table 3.6: over 60% were staff nurses.

<table>
<thead>
<tr>
<th>Post held</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled nurse</td>
<td>15%</td>
</tr>
<tr>
<td>Staff nurse</td>
<td>61%</td>
</tr>
<tr>
<td>Senior staff nurse</td>
<td>7%</td>
</tr>
<tr>
<td>Junior sister/charge nurse</td>
<td>7%</td>
</tr>
<tr>
<td>Sister/charge nurse/ward manager</td>
<td>9%</td>
</tr>
<tr>
<td>Clinical nurse specialists</td>
<td>3%</td>
</tr>
</tbody>
</table>

### Table 3.6 Post held

### Clinical grading

The grading of staff is shown in Table 3.7: the majority of respondents were in grades D and E, which are staff nurse grades; this correlates with the response to the previous section on type of post held.
### Table 3.7 Grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>29%</td>
</tr>
<tr>
<td>E</td>
<td>36%</td>
</tr>
<tr>
<td>F</td>
<td>15%</td>
</tr>
<tr>
<td>G</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
</tr>
</tbody>
</table>

Responses of nurses who had undertaken their own research

The results for nurses who had undertaken their own research were compared with those who had not undertaken their own research. Researchers’ clinical grades were statistically significantly higher than non-researchers: Mann-Whitney U = 13292.0 2-tailed $p < 0.001$. Researchers ranked the importance of research into utilisation of research findings statistically significantly higher than non-researchers: Mann-Whitney U = 16496.5 $p = 0.018$. Researchers were more likely to be first-level Registered Nurses than non-researchers: $\chi^2 = 12.626$ df 1 $p < 0.001$.

Relationship of academic qualifications with professional registrations

Professional registrations were compared with academic qualifications for statistically significant differences. Registered Nurses (Adult) were more likely to have a diploma, $\chi^2 = 40.39$ df 1 $p < 0.0001$ and a first degree, $\chi^2 = 12.662$ df 1 $p < 0.001$. Enrolled Nurses were less likely to have a diploma, $\chi^2 = 27.035$ df 1 $p < 0.001$; first degree, $\chi^2 = 6.952$ df 1 $p < 0.008$; or postgraduate diploma, $\chi^2 = 5.378$ df 1 *Fisher’s Exact Test* $p < 0.015$. Mental health nurses were more likely to have a postgraduate diploma, $\chi^2 = 9.367$ df 1 *Fisher’s Exact Test* $p = 0.037$. All health visitors had a diploma, $\chi^2 = 5.120$ df 1 *Fisher’s Exact Test* $p = 0.037$.

Undertaking research
Staff were asked if they were interested in undertaking research; 38% said they would like to do so (see Table 3.8). Existing research activity was also ascertained; 18% of respondents had undertaken their own research and 22% of respondents had assisted others with research.

<table>
<thead>
<tr>
<th>Would like to undertake own research</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>38%</td>
</tr>
<tr>
<td>No</td>
<td>22%</td>
</tr>
<tr>
<td>Don't know</td>
<td>39%</td>
</tr>
</tbody>
</table>

Table 3.8 Undertaking research

Barriers to undertaking research

Perceived barriers to research were identified (see Tables 3.9 and 3.10). Most practitioners thought there were barriers, with time pressures overwhelmingly identified as the main one. Resources, knowledge of research methods and organisational support were also identified by many as issues. Educational needs were identified in more depth (see Table 3.11) with many aspects identified. Over half the respondents wanted more information about applying research findings to practice, with 48% wanting research methods workshops.

<table>
<thead>
<tr>
<th>Are there barriers to undertaking research?</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>87%</td>
</tr>
<tr>
<td>No</td>
<td>5%</td>
</tr>
<tr>
<td>Don't know</td>
<td>8%</td>
</tr>
</tbody>
</table>

Table 3.9 Barriers to undertaking research
### Table 3.10 Types of barrier

<table>
<thead>
<tr>
<th>Types of barrier</th>
<th>Percentage (not cumulative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time pressures</td>
<td>80%</td>
</tr>
<tr>
<td>Resources</td>
<td>40%</td>
</tr>
<tr>
<td>Knowledge of research methods</td>
<td>38%</td>
</tr>
<tr>
<td>Organisational support</td>
<td>35%</td>
</tr>
<tr>
<td>Nurses attitudes to research</td>
<td>30%</td>
</tr>
<tr>
<td>Levels of expert advice</td>
<td>27%</td>
</tr>
<tr>
<td>Access to existing research</td>
<td>17%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
</tr>
</tbody>
</table>

### Table 3.11 Educational needs

<table>
<thead>
<tr>
<th>Educational needs</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applying research to practice</td>
<td>53%</td>
</tr>
<tr>
<td>Research methods workshops</td>
<td>48%</td>
</tr>
<tr>
<td>Writing research proposals</td>
<td>43%</td>
</tr>
<tr>
<td>Applying for funding</td>
<td>39%</td>
</tr>
<tr>
<td>Presentations of ongoing research</td>
<td>33%</td>
</tr>
<tr>
<td>Writing for publication</td>
<td>32%</td>
</tr>
<tr>
<td>Critical appraisal skills</td>
<td>31%</td>
</tr>
<tr>
<td>Ethics committee applications</td>
<td>29%</td>
</tr>
<tr>
<td>Undertaking a literature search</td>
<td>25%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
<tr>
<td>None</td>
<td>5%</td>
</tr>
</tbody>
</table>

### Future research areas

Respondents were asked their views on the importance of discrete areas for future research. Ten broad themes were given (adapted from Hunt 1997), and a five point Likert-type scale applied to each area. The themes were:

- major life events
- specific and vulnerable groups
- care and treatment interventions
- communication and co-ordination
- quality
- management and organisation
- research utilisation
- health promotion
- education
• nursing resource allocation

All ten areas were rated important or very important by the majority of respondents (from a minimum of 81% for major life events to a maximum of 97% for care and treatment). Percentage scores for areas regarded as less important or not important ranged from 0.6% for care and treatment to 7.2% for education.

Summary of findings, Section 1

The principal findings were:

• there was an expressed interest in undertaking research
• barriers to undertaking research included time pressures, available resources, knowledge of research methods, levels of support available
• there was a low educational base in research methods
• statistically significant differences were discovered in areas of gender, and between nurses who were researchers and those who were not; there was also a relationship between levels of professional registration and academic qualifications.
• educational needs identified included utilisation of research in practice, methods workshops, writing proposals, applying for funding, writing and appraisal skills

Research profiles

A total of 72 research profiles were returned; only 62 were available for analysis, as previously discussed. The profiles were analysed by group. Group 1 was nurses undertaking their own research. Group 2 was nurses who had assisted others with research; this was research undertaken by medical staff in all cases.
There were 29 profiles from nurses who had undertaken their own research (Group 1), and 33 from those who had assisted doctors with research (Group 2). Statistical analysis was performed by group and content analysis of research themes was undertaken. Frequency tables of results and statistically significant results are presented first followed by results of the content analysis.

Type of research design

Projects used a mix of designs, and both qualitative and quantitative methods were used (see Table 3.12). However, there were few qualitative projects in Group 2. This was statistically significant: \( \text{Chi}^2 = 9.461 \; \text{df} \; 1 \; \text{p} = 0.002. \)

<table>
<thead>
<tr>
<th>Type of research</th>
<th>Group 1 – own research</th>
<th>Group 2 - medical research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantitative</td>
<td>90%</td>
<td>97%</td>
</tr>
<tr>
<td>Qualitative</td>
<td>38%</td>
<td>6%</td>
</tr>
</tbody>
</table>

(Not cumulative - several of the profiles used mixed quantitative and qualitative methods, especially projects undertaken for Master's degrees.)

Table 3.12 Type of research

Undertaking the research

Most nurses undertaking their own research did so as part of an academic award (see Table 3.13).

<table>
<thead>
<tr>
<th>Reason for undertaking research</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>For degree/academic course</td>
<td>83%</td>
<td>0%</td>
</tr>
<tr>
<td>Own interest</td>
<td>17%</td>
<td>0%</td>
</tr>
<tr>
<td>Assisting others</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3.13 Reason for undertaking the research

Other staff were less likely to be involved with the project in Group 1, \( \text{Chi}^2 = 18.717 \; \text{df} \; 1 \; \text{p} \leq 0.001 \) (see Table 3.14). In all of the Group 1 projects the nurse
was the project leader, whereas in Group 2 the nurse was a research assistant, 
\[ \chi^2 = 62.0 \text{ df } 1 \ p \leq 0.001. \]

<table>
<thead>
<tr>
<th>Other staff involved</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>55%</td>
<td>100%</td>
</tr>
<tr>
<td>No</td>
<td>45%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Table 3.14 Other staff involved with the project**

Research took place in several clinical areas (see Table 3.15). Nurses undertaking their own research were more likely to use other units than wards or departments; medical research was more likely to be undertaken in a department, \[ \chi^2 = 12.50 \text{ df } 2 \ p = 0.002. \]

<table>
<thead>
<tr>
<th>Unit where research took place</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ward</td>
<td>28%</td>
<td>33%</td>
</tr>
<tr>
<td>Department</td>
<td>34%</td>
<td>64%</td>
</tr>
<tr>
<td>Other</td>
<td>38%</td>
<td>3%</td>
</tr>
</tbody>
</table>

**Table 3.15 Unit where research took place**

Very little medical research did not require ethics approval, whereas NR was less likely to have sought this, \[ \chi^2 = 23.727 \text{ df } 1 \ p \leq 0.001 \text{ (see Tables 3.16 and 3.17).} \]

(These projects were carried out before the introduction of ethics approval for every project taking place on NHS premises. At this point in time, projects not directly involving patients/clients were not required to seek ethics approval.)

<table>
<thead>
<tr>
<th>Ethics approval sought</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>31%</td>
<td>82%</td>
</tr>
<tr>
<td>No – not needed</td>
<td>69%</td>
<td>0%</td>
</tr>
<tr>
<td>No</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>Not stated</td>
<td>0%</td>
<td>12%</td>
</tr>
</tbody>
</table>

**Table 3.16 Ethics approval sought**
Table 3.17 Ethics approval granted

There were a few nursing projects where it had been stated that ethics approval was not needed, yet patients/clients had been involved in the research. In one project listed in the medical group stating that ethics approval had been refused, the project had nevertheless gone ahead. These problems demonstrated the need for the introduction of a formal support and monitoring R&D system.

More medical research obtained funding compared to NR,
\[ \chi^2 = 5.249 \text{ df } 1 \ p = 0.022 \] (see Table 3.18); medical research tended to be over a longer time period than NR, \[ \chi^2 = 13.892 \text{ df } 1 \ p \leq 0.001 \] (see Table 3.19).

Table 3.18 External funding for project

Table 3.19 Duration of project

A breakdown of research methods used is given in Table 3.20. No nursing projects used randomised controlled trials (RCTs), whereas this was the commonest
method used in medical projects. The method of data analysis reflects this (see Table 3.21). Table 3.22 shows influence on practice and Table 3.23 shows whether or not follow-up research was undertaken.

<table>
<thead>
<tr>
<th>Study design</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey</td>
<td>48%</td>
<td>31%</td>
</tr>
<tr>
<td>Randomised controlled trials</td>
<td>0%</td>
<td>44%</td>
</tr>
<tr>
<td>Interviews</td>
<td>3.5%</td>
<td>0%</td>
</tr>
<tr>
<td>Observation</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>Action research</td>
<td>3.5%</td>
<td>0%</td>
</tr>
<tr>
<td>Mixed method</td>
<td>28%</td>
<td>3%</td>
</tr>
<tr>
<td>Other experimental</td>
<td>10%</td>
<td>13%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Table 3.20 Study design

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive statistics</td>
<td>42%</td>
<td>14%</td>
</tr>
<tr>
<td>Inferential statistics</td>
<td>17%</td>
<td>0%</td>
</tr>
<tr>
<td>Content analysis</td>
<td>3.5%</td>
<td>3%</td>
</tr>
<tr>
<td>Grounded theory</td>
<td>3.5%</td>
<td>0%</td>
</tr>
<tr>
<td>Mixed methods</td>
<td>31%</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 3.21 Methods of analysis

<table>
<thead>
<tr>
<th>Changes to practice</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>28%</td>
<td>20%</td>
</tr>
<tr>
<td>No</td>
<td>17%</td>
<td>20%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>45%</td>
<td>20%</td>
</tr>
<tr>
<td>To follow later</td>
<td>10%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Table 3.22 Changes to practice as a result of research

<table>
<thead>
<tr>
<th>Follow up research</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes - completed</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>Yes - in progress</td>
<td>4%</td>
<td>28%</td>
</tr>
<tr>
<td>No - still to be done</td>
<td>31%</td>
<td>30%</td>
</tr>
<tr>
<td>No - not needed</td>
<td>38%</td>
<td>17%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>20%</td>
<td>16%</td>
</tr>
</tbody>
</table>

Table 3.23 Follow-up research undertaken

Only a small percentage of projects were published, although a sizeable proportion of NR was presented at conferences (see Table 3.24). More NR was complete than medical research, which tended to be ongoing: $\chi^2 = 15.647$ df 1 $p$
≤ 0.001 (see Table 3.25). This could explain the small numbers of published research in Group 2.

<table>
<thead>
<tr>
<th>Publications</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer reviewed</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Non peer reviewed</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>Submitted</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>Work not yet completed</td>
<td>0%</td>
<td>38%</td>
</tr>
<tr>
<td>No</td>
<td>79%</td>
<td>48%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conferences</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer reviewed</td>
<td>24%</td>
<td>12%</td>
</tr>
<tr>
<td>Non peer reviewed</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>Work not yet completed</td>
<td>0%</td>
<td>38%</td>
</tr>
<tr>
<td>No</td>
<td>69%</td>
<td>50%</td>
</tr>
</tbody>
</table>

**Table 3.24 Publications and conferences**

<table>
<thead>
<tr>
<th>Research completed</th>
<th>Group 1</th>
<th>Group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>72%</td>
<td>21%</td>
</tr>
<tr>
<td>No – in progress</td>
<td>28%</td>
<td>76%</td>
</tr>
<tr>
<td>Not stated</td>
<td>0%</td>
<td>3%</td>
</tr>
</tbody>
</table>

**Table 3.25 Research completed**

**Content analysis of themes**

A thematic analysis was also undertaken: the type of research undertaken was initially divided into ten broad categories, adapted from Hunt (1997) (see pages 55-56). Sometimes projects came into two or three themes: for example, most medical research was on specific diagnostic categories, dependent on the specialism of the doctor leading the research, and then could also be categorised by the nature of the study. For example, drugs trials would be classified under both specific diagnostic categories and care and treatment.

When the initial thematic classification was complete, the information was then coded and entered onto SPSS® for further statistical analysis to compare the themes between Groups 1 and 2.
Frequencies were calculated to examine the overall classification of themes. Medical research concentrated heavily on care and treatment and specific diagnostic categories: 88% of the projects involved care and treatment projects, primarily because of the number of RCTs of new treatments. Fifty-one percent involved specific diagnostic categories, usually because a specialist doctor was leading the work into his/her own specialised field. Health promotion had a slightly higher concentration in the medical than in the NR group, with 15% of projects having a health promotion theme. This was chiefly to be found in areas such as urodynamics, where work was looking at the prevention of stress incontinence, and also in research by rheumatologists looking at the prevention of osteoporosis. Other categories such as communication and education were very poorly represented in this group. Three projects had a large audit component, and it is questionable whether these were research in its strictest sense. Many projects in the medical group were still in progress, and therefore details of results were very limited and often absent.

The NR projects were more varied in themes, and included areas such as education, communication, care and treatment and specific diagnostic categories in relatively equal amounts. Areas of sparse representation were health promotion, management and organisation, and research utilisation. Most of the projects were completed and most profiles were able to give results and recommendations. These were entered onto the Trust's research database.

Neither group had any projects that came into the theme of resource allocation. Many practitioners regarded this area as very important for future research, and it
is interesting that no research at that time seemed to be addressing the topic, considering the resource issues in today's NHS.

Statistically significant differences were found in three of the themes:

• Care and treatment: the medical research group undertook more research in this category; $\chi^2 = 16.872$ df 1 $p \leq 0.001$

• Education: some NR was undertaken in this category, whereas no medical research was in this category; $\chi^2 = 9.685$ df 1 *Fisher's Exact Test $p = 0.002$

• Communication: medical research had no projects, whereas NR had over 22% of projects in this category; $\chi^2 = 8.14$ df 1 *Fisher's Exact Test $p = 0.006$

Summary of findings, Section 2

The main findings were that the nursing projects, compared with medical projects, used a wider mix of methods and analyses, were shorter in duration, and had a greater variety of themes. They were less likely to attract external funding or lead to follow-up research.

Overall findings from Phase 1 will now be discussed and outcomes of the research summarised in Chapter 4.
CHAPTER 4. DISCUSSION, RECOMMENDATIONS AND OUTCOME OF

PHASE 1

Introduction
The results from the survey will now be analysed with reference to the literature. The process of developing a NR strategy is described and the implementation of this into practice is outlined. The outcomes of Phase 1 will then be analysed to identify whether the aim and objectives were met. Finally, the refocusing of the future direction of the research will be discussed.

Discussion
The findings of this survey replicated the results of several similar studies. Barriers to undertaking research, educational and organisational issues that were identified concurred with previous research findings. Kitson and Currie (1996) found little supervision or support for nurses with a lack of commitment from the organisations. Martin (1993) also found a supportive organisational climate to be associated with increased research productivity and Malby (1996) and Jack and Oldham (1997) noted that a cultural change was needed in organisations to facilitate NR activity.

These issues are major obstacles for nurses in the clinical setting who wish to undertake R&D activities; in practice, what seems to happen is that NR activity is concentrated on those nurses undertaking academic study, and those working in specialist posts where research activity is recognised as part of their role.

There needs to be a fundamental shift in attitudes of managers and staff if more widespread R&D activity is to develop; Hicks (1995a) found, for example, that
nurse researchers were perceived as not good clinicians by managers and
Bostrom et al. (1989) recommended that clinicians need to develop a more
questioning attitude and a willing acceptance of change. Time constraints may be
such that it is impossible for most staff to engage in research activity; research
trends within the NHS are towards large-scale multidisciplinary projects where
nurses may have a minor role (Thompson and Watson 2004). If this is the way in
which NHS R&D is to develop, it has implications for the generation of nursing
knowledge and the development of nursing practice.

Historically, nurse researchers working in the higher education setting have driven
NR, collaborating with NHS staff for access to research populations (Lelean and
Clarke 1990). Whether or not this model will alter depends on issues identified
such as time, resources and levels of knowledge. Indeed, without adequate
knowledge of research design and methods and appropriate supervision or
facilitation, it would not be in the interests of the NHS or patients for research to be
undertaken by staff who were not educated in this field. Over the last 15-20 years,
some researchers have attempted to alter the balance by using research designs
that directly involve clinical nurses, such as action research projects, acting as
facilitators/supervisors; however these approaches have had their own problems,
such as working in units with a high staff turnover or internal politics that threaten
the study (see, for example, Meyer 1993, 1995a).

The NHS is now promoting an evidence-based approach and all registered nurses
are expected to be able to understand, critically analyse and apply research and
evidence to their practice (Nursing and Midwifery Council (NMC) 2002 p8); the
Clinical Governance (CG) framework has been established to aid this process
The future of clinical nurses' involvement in research could be limited to the application of research findings rather than actually undertaking research themselves. It is certainly impractical to expect, given the current situation, that all clinical staff are able to undertake research in addition to their current workload. However, organisations need to recognise that some staff will be keen to expand their roles in this direction and provide appropriate support to the few who do so.

The analysis of the research profiles drew some interesting comparisons between research carried out by nurses and by doctors. Although only a small sample, it confirmed that medical research was more likely to be financed than NR (Foundation of Nursing Studies (FoNS) 1996). The FoNS found that nurses were often discouraged from applying for funds based on the assumption they would be rejected, due to a fear of medical dominance of ethics and grants committees. Parkin and Bullock (2005) attribute this to a paternalistic relationship with medical colleagues as well as a reflection on the lack of maturity of nursing as a profession. In contrast, however, Mead et al. (1997) refuted the idea that NR is completely un-developed, and found that where nursing proposals were pursued vigorously, they received higher scientific ratings than medical-led proposals and were proportionately more likely to gain funding. The main reason they found for the small numbers of funded proposals were that very few nurses put forward proposals, and that many were withdrawn voluntarily after receiving insensitively-worded referees' comments. Dawson et al. (1998) studied outputs from biomedical research outputs database (ROD) and found that, although NR was the fastest-growing of the 26 sub-specialisms studied, 70% of NR projects stated no funding
source, implying self-funding. This compared to 40% for the outputs for the ROD as a whole (Rafferty et al. 2000b).

Small numbers of NR projects were also reported in other mapping exercises of NR activity: Bartlett et al. (1997) found only 42 projects in one acute NHS organisation over a six year period, whilst Kitson and Currie (1996) surveyed four health authorities but only found 136 research active nurses.

The medical projects were far less likely to be small-scale, and many were ongoing and likely to lead to follow-up studies. This could be seen as a reflection of the way in which medical research is supported and prioritised in the NHS: Rafferty et al. (2003) stated that the UK invested almost £3.5 billion in medical research per annum from public and private sources, compared to £3 million for nursing and AHPs in 1996-7. Even with an increase in activity and income in nursing and AHP research up to £9.7 million in 1999/2000:

‘Doctors have benefited from decades of investment in research and development.’ (Rafferty et al. 2003 p834)

Research designs differed, with far greater use of RCTs and other experimental quantitative methods by doctors, and broader usage of methods (including qualitative research) by nurses. Topic areas studied also differed and reflected the fact that, for nurses, communication was seen as in need of research, whilst it was not represented at all in the medical studies. Although there has been a great deal of media attention that has in part focussed on doctors’ communication skills (for example, BBC Radio Four’s “The Commission”, 2000), with doctors stating in defence that they are now better prepared in this field, this does not seem to have been translated into research in the topic in this sample. Neither group studied
resources; however, it may be that this topic is well-represented in research by others, such as managerial staff within the NHS. If this is the case, however, nurses need to ensure that the questions being addressed are relevant to their practice: if funding decisions that affect nursing are based on research undertaken by others, it would be pertinent to ask whether the relevant nursing issues are known, and have been investigated adequately.

The results of the research profile analysis, although not generalisable, were predictable and served to confirm many perceived inequalities that exist in the support of research between different disciplines. McMahon et al. (2000), for example, reported that nurse executives wanted to achieve a culture of equality in R&D services, which they felt was lacking whilst Rafferty et al. (2000b) found a lack of support via funding, which has contributed to the low volume of NR.

The analysis of the research profiles provided the Trust with some baseline information about the nature and volume of NR activity undertaken; they were subsequently able to record this on their database as a starting point and then had information on the overall picture at that time. Prior to this, they had no information on the extent or nature of NR activity. The results of both the questionnaire and the research profile then informed the development of a strategy to develop nursing R&D in the organisation.

Conclusions
The analysis of the questionnaire provided some interesting information that confirmed the results of other research. Respondents perceived time to be a major barrier to undertaking research, but other barriers such as lack of resources and
organisational support were also mentioned. Educational needs were identified, with most respondents identifying at least one area of need. The collation of research profiles provided the Trust with information on research activity amongst nursing staff, which was subsequently recorded on their research database. This information informed future strategy development.

Outcome of Phase 1: A nursing research strategy

Process

The results of the survey were presented to the Trust, and as a result a steering group was formed to consider them and devise a NR strategy for the future. The steering group was comprised of members from clinical nursing staff, management and academics from the local higher education provider. A proposed Nursing and Midwifery Research Strategy was devised by this group in light of the results of the research and this was submitted to the Trust management board for consideration.

The main recommendations of the strategy will now be briefly described. These centred on three dimensions: the management of research, education for research and support for research.

Management of research

• The nursing strategy should be integrated with the overall R&D strategy for the Trust, which was being developed at that time. The Trust, through its R&D Committee, had developed a policy for the management of R&D. This included setting up a central database, meeting national requirements for registering and monitoring research, collaboration with the local Research and Development Support Unit (RDSU), and peer review. The steering
group considered that the proposed nursing strategy should be incorporated within this scheme under the guidance of the R&D Committee.

- A steering group consisting of representatives from management, clinical nursing practice, nurse education and NR should advise on the management of NR, educational requirements of practitioners and also on any future changes in government or Trust policy with associated implications for NR. This steering group would be accountable to the R&D subcommittee, which is itself accountable to the Trust management board.

- The central R&D database should be used to document all proposed, current and past NR activity: this database is managed by the R&D manager. (Details from the research profiles were already entered onto this database in accordance with Culyer requirements.)

**Education for research**

Educational needs were highlighted in the survey undertaken. The NR strategy considered several aspects:

- Links with higher education should be encouraged in order to utilise existing provision of research modules provided at Level 2 and Level 3 as part of local BSc (Hons) Nursing/Health Studies programmes and as stand-alone modules.

- Additional programmes for practitioners already experienced at these levels who wish to further develop advanced skills should be accessible: Master of Science (MSc) courses in Social Research or Psychological Research were offered by the local HEI and should be utilised.
• Short courses and study days geared to specific needs highlighted by the survey should be introduced. Such foundation research courses could be run “in-house” within the Trust.

• Short courses and study days should also be arranged “in-house” to provide updates to nurses who have previously undertaken university modules, thus ensuring continuing education and development in this field.

Support for research

Specific support for nurses was considered by the steering group:

• Support for NR should be provided by a research and development nurse, to co-ordinate and advise on potential NR and to support nurse researchers.

• To ensure that the work is aligned with the overall trust R&D strategy, the R&D nurse should work closely with the R&D manager via the NR steering group.

• There would be scope for a joint appointment with a higher education institution. Consideration should be given to the support costs associated with such a post.

• Support should also be provided through a link with one senior nurse in each directorate.

Implementation of the strategy

By the end of the study period, the Trust management board had considered the proposed strategy, but was unable to fund the setting up of the R&D nurse support post and so further implementation was delayed. However, approximately 12 months after the project was completed the Trust managed to gain extra support
for nursing and AHP research via the RDSU. Extra monies were provided from NHS Regional office to the RDSU for the appointment of another member of the research advisory staff, and an appointment was made of someone with a qualitative health research background to complement the quantitative expertise already available. This person has remained in post since and all practitioners in the Trust now have access via the RDSU to support for all types of research and development activity, education and supervision of research.

Meeting the research aims and objectives
I will now reflect on how well the aims and objectives of this phase were met. The aims of Phase 1 were to ascertain NR activity and to develop a strategy to promote nursing R&D for one NHS trust. Each objective will be reviewed separately to see if it was met and an overall conclusion made.

To ascertain the amount and type of research activity involving nurses undertaken within the trust
The survey was able to partially achieve this objective: research profiles were received from 72 nurses, of which 62 were usable. However, in view of the low response rate to the survey it is impossible to determine whether or not all NR activity was documented. It can be speculated, however, that those who undertook NR were more likely to be interested in the topic and would have been more motivated to return profiles than those who had little or no interest in the topic. For those usable profiles that were received, content analysis did enable the type of research to be ascertained.

Streeton et al. (2004) used a snowballing technique to identify researchers when
mapping research activity in organisations in one English county. They commented how this helps to identify ‘hard-to-reach’ or ‘hidden’ groups (p37) and that mapping research activity could be seen as sensitive due to threats of intrusion, sanction, politics and confidentiality (for example perceived threats to credibility and ability, and issues with litigation, funding, power and quality). It is possible that using this technique and making personal contact with potential participants, in advance of sending out the research profiles, may have increased the response rate and identified further NR in the organisation. However, this was not feasible in view of the time limitations of the study and the fact that I was undertaking the research alone: Streeton et al. (2004) acknowledge the method to be labour intensive and used a team of researchers to carry this out.

However, I had contacted and visited departments and wards before distribution and staff were also informed via liaison meetings between nurse managers and ward managers in order to publicise the project to try and encourage researchers to respond.

To record this activity on the trust’s research and development database

This was undertaken with all received profiles that were usable. Ten profiles were not recorded due to a lack of detail that made them impossible to analyse. However, they all were medical research projects that were more likely to have been known of and already on the database due to external funding, ethics applications or as part of large multi-centre studies and therefore approved in advance by research managers.
To identify any potential barriers to utilisation and development of nursing research

The questionnaire was able to identify many potential barriers to NR development and use. The low response rate could also have potentially affected these results; however, the results reflected the findings of other studies in this area, which provides some replication of previous research.

To explore priority areas for future research

Questionnaires listed ten key areas of practice, devised from the literature, and asked practitioners to rate their importance for future research. All were rated as important or highly important by the majority of respondents, as discussed in Chapter 3, indicating the need for a wide spectrum of research in all areas for future NR. Further work would be needed within the trust to identify immediate priority areas relevant to local health needs and to devise a programme for the future; this was outside the scope of this research.

The research was also able to identify several key areas of practice being investigated by nurses within the trust from the profiles and also identified follow-up research which was in progress or being planned for some of these projects.

To identify educational needs of practitioners

The results were able to identify some educational needs; ways to address these were incorporated into the NR strategy and have been implemented.

To develop a research-based strategy for future nursing R&D
This was done following the analysis of results, and was eventually implemented by the Trust, although not in the exact way recommended by the steering group. However, the broad principles of the strategy were implemented, with a dedicated, accessible researcher experienced in qualitative research methods being employed via the RDSU to complement the existing quantitative expertise already available for the trust. This person has provided educational support, study days, research supervision and research support for nurses and AHPs for several years and collaborates with the local HEI to improve communication and coordination of research between the two organisations.

Conclusions

It can be seen from the above evaluation of research objectives that the aims of ascertaining NR activity and developing a strategy to promote nursing R&D for one NHS trust were partially met. The major limitation was the low response rate, which meant that it could not be guaranteed that all NR activity was recorded. However, the strategy to promote NR was developed in response to the findings of the survey, in conjunction with input from the steering group and findings from the existing literature. The Trust was able to use this to provide a more structured way to support NR activity. Trust R&D managers have since amended procedures for recording of research activity in line with both the Culyer recommendations (DoH 1994a) and with the newer research governance recommendations (DoH 2001a); this now provides a more accurate means to record all R&D activity throughout the organisation.

Direction of the doctoral research

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The delay in implementation affected the future direction of this doctoral research, which initially included a second action research phase to implement and evaluate the strategy. This was therefore revised after discussion with supervisors and led to the decision to undertake a wider study, using a case study approach, to investigate the situation in other NHS organisations with regard to NR activity, monitoring and support. This was undertaken and Phase 2 of the research will now be reported in Part 2 of the thesis.
PART TWO

NURSING RESEARCH IN FIVE NHS TRUSTS: ACTIVITY AND MODELS OF SUPPORT
CHAPTER 5. LITERATURE REVIEW

Introduction

In this chapter, the review of the literature is updated from the initial review prior to Phase 1. The search strategies and keywords will be given. The review is then structured in line with the main aims and objectives of the study. Literature will be analysed to provide an overview of the findings and then synthesised to draw out relevant areas that inform the research.

Methods

Search strategy

The aims of Phase 2 of the study were to explore nursing research activity and analyse support for nursing research within five NHS organisations. The specific objectives were:

- To undertake in-depth profiles of organisational support and the management of nursing research
- To identify organisational models of how nursing research was managed and supported
- To explore whether these organisational models impacted on nursing research activity
- To identify factors influencing NR activity in the clinical setting
- To analyse the perceptions and experiences of nurses undertaking nursing research in the clinical setting
- To consider the impact of findings for nursing knowledge generation
In order to review the literature, the search terms were defined in relation to these aims and objectives: *nursing research and development*, *nursing research strategies*, *research policy*, *research support*, *nursing research activity*, *nursing knowledge generation*.

The literature search was undertaken using the following sources:

- Computerised search engines and databases, for example, Ovid Online (for access to CINAHL, BNI [British Nursing Index], Blackwell Synergy, Your journals @ Ovid), PubMed, BIDS (Bath Information Data Services), Scopus, Cochrane Library, NRR, and Google (for access to specific named documents, for example government documents on DoH websites).
- Hand searching of nursing and health service journals and books
- 'Grey' literature such as policy documents, conference proceedings, local project reports
- Citations in papers identified by above searches

Material included in the review was written in English. Reports in a language other than English were not included due to translation issues and financial costs. The search for relevant literature continued throughout the life of the project in order to keep up-to-date with new publications and research wherever possible.

**Findings**

In contrast to Phase 1, there was far more material available, with a constant stream of relevant articles appearing over the years since Phase 1 was completed. Leading on from the initial review in Chapter 1, literature published since 1997 will
be analysed and discussed. Literature published before 1998 that was not relevant to Phase 1 but is relevant to Phase 2 will also be reviewed in this section.

The review is structured in three parts to reflect the aims and objectives of Phase 2. The first considers aspects of organisational support for NR, including national policy initiatives and the effects of these on NR funding, capacity and monitoring, as well as organisational support strategies. The second looks at NR activity, including NR activity in the clinical setting, the experiences of nurse researchers and career pathways. The third examines nursing knowledge generation and the research contribution to the knowledge base.

When reviewing the literature, discursive and anecdotal papers and policy documents will be summarised and relevance to the study considered (in the case of large documents such as government policy, only relevant sections will be reviewed). Primary research will be analysed and reviewed and limitations of the research considered, appraising its rigour. Literature on research utilisation in practice/evidence-based practice is not reviewed; although interesting as background reading, this was not found to inform the research substantially as its focus was on using research rather than undertaking it.

Review of the literature

Organisational support for nursing research

National Policy
Government R&D policy initiatives have further developed since the Culyer report (DoH 1994a), reviewed in Part 1, was implemented. Policy that specifically has an impact on NR activity will be reviewed, but in order to give an idea of the sheer volume of publications that have contributed to the growth of research, the evidence-based practice movement and current R&D procedures in the NHS, Table 5.1 (adapted from Mulhall and Le May 1999 p2) lists key R&D policy publications relevant to healthcare research.
<table>
<thead>
<tr>
<th>Year</th>
<th>Publication</th>
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<tbody>
<tr>
<td>1988</td>
<td>House of Lords Select Committee on Science and Technology: Priorities in Medical Research</td>
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<tr>
<td>1989a</td>
<td>DoH: Priorities in Medical Research</td>
</tr>
<tr>
<td>1989b</td>
<td>DoH: Working for Patients</td>
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<td>1990</td>
<td>Richardson et al. Taking Research Seriously</td>
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<td>1991</td>
<td>DoH: Research for Health</td>
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<tr>
<td>1993a</td>
<td>DoH: Report of the Taskforce on the Strategy for Research in Nursing, Midwifery and Health Visiting</td>
</tr>
<tr>
<td>1993c</td>
<td>DoH: A Vision for the Future</td>
</tr>
<tr>
<td>1994a</td>
<td>DoH: Supporting Research and Development in the NHS</td>
</tr>
<tr>
<td>1994b</td>
<td>DoH: Testing the Vision</td>
</tr>
<tr>
<td>1995a</td>
<td>DoH: Methods to promote the Implementation of Research Findings in the NHS</td>
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<tr>
<td>1995b</td>
<td>DoH: Consumers and Research in the NHS</td>
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<tr>
<td>1996a</td>
<td>DoH: Research and Development: towards an Evidence-based Health Service</td>
</tr>
<tr>
<td>1996b</td>
<td>DoH: Promoting Clinical Effectiveness</td>
</tr>
<tr>
<td>1997a</td>
<td>DoH: The New NHS: Modern. Dependable</td>
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<tr>
<td>1998a</td>
<td>DoH: A First Class Service: quality in the new NHS</td>
</tr>
<tr>
<td>1998</td>
<td>Workforce Capacity Development Group: Developing Human Resources for health-related R&amp;D: Next steps</td>
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<tr>
<td>1999a</td>
<td>DoH: Making a Difference</td>
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<tr>
<td>1999c</td>
<td>DoH: NHS Strategic Review of the R&amp;D Levy</td>
</tr>
<tr>
<td>2000a</td>
<td>DoH: Towards a Strategy for Nursing Research and Development: proposals for action</td>
</tr>
<tr>
<td>2000b</td>
<td>DoH: Research and Development for a first class service: R&amp;D funding in the new NHS.</td>
</tr>
<tr>
<td>2001a</td>
<td>DoH: A New Research Governance Framework</td>
</tr>
<tr>
<td>2001b</td>
<td>DoH: Governance arrangements for Research Ethics Committees</td>
</tr>
<tr>
<td>2001c</td>
<td>DoH: NHS Priorities and Needs: R&amp;D Funding: a position paper</td>
</tr>
<tr>
<td>2001</td>
<td>Higher Education Funding Council for England (HEFCE): Promoting Research in Nursing and the Allied Health Professions (Research Report 01/64)</td>
</tr>
<tr>
<td>2003</td>
<td>National Co-ordinating Centre for Service Delivery and Organisation research and development (NCCSDO): Identifying research priorities for nursing and midwifery service delivery and organisation</td>
</tr>
</tbody>
</table>

Key to abbreviations: DoH = Department of Health, NHS = National Health Service, R&D = research and development

Table 5:1 Key publications In the development of a research culture in the NHS. (Adapted from Mulhall and Le May 1999 p2)

In 1988 there was central drive towards active dissemination and implementation of evidence, with an associated increase in policy documents (Mulhall and Le May 1999 p2)
1999). The review by the House of Lords Select Committee on Science and Technology (1988) recommended a more co-ordinated approach to R&D, with the appointment of a national R&D director and regional R&D directors; a national R&D programme with complementary regional programmes was established as a result (Shaw and Clifford 2004). Policy development has continued and, with the election of the Labour government in 1997, research management has become even more structured and centralised with the advent of research governance (DoH 2001a).

As reviewed in Chapter 1, the DoH identified the need for a strategy to secure NR activity, but recommended that this should be incorporated into overall R&D structures (DoH 1993b). However, this commitment to supporting NR was not followed through in the publication of an important research strategy document, Research Capacity Strategy for the Department of Health and the NHS: A first statement (DoH 1996c). Apart from referring to the lack of a research culture in nursing, NR received little attention in this document, which focused primarily on medical research. Non-medical HCPs did, however, feature in an annex which considered many of the issues already highlighted in the 1993 report, but no consideration was given to how these issues might be addressed (Rafferty et al. 2002).

The election of a Labour government in 1997 saw the publication of the first of many policy documents concerned with NHS modernisation, including changes in R&D.
With regard to R&D a programme of high quality scientific research on the cost-effectiveness and quality of care, to be known as Service Delivery And Organisation (SDO) R&D was proposed (DoH 1997a) along with the first national survey of patient and user experiences.

In 1999, the DoH published 'Making a Difference' (DoH 1999a), which considered how the potential contribution to health care by nurses could be improved by changes to pre- and post-registration education and a clinical career structure. Again, research was not highlighted in the document as an important means to improve care. It did not link the relevance of clinical research to clinical skills, and missed an opportunity to ensure an adequate nursing research infrastructure (Rafferty et al. 2002). It was noted that nurses needed more skills in interpreting and applying research findings, but the need to create and supply nursing knowledge in order to have evidence on which to base practice was not discussed. However, the document did outline plans to introduce a new role of nurse consultant, in which both clinical and research work were later defined as integral (DoH 1999b). 'Making a Difference' also reviewed clinical career pathways but did not discuss the possibility of nursing careers moving to a model adopted by medicine, where movement between and integration of research and clinical roles is expected (Rafferty et al. 2002). The most notable recommendations were that research capacity needed to increase, nursing needed a voice via better clinical leadership and critical appraisal skills needed building (although the role of nursing research leaders was not acknowledged as part of these processes).

In 1999, the strategic review of the R&D levy, the Clarke Report, (DoH 1999c) made 19 recommendations in seven areas, as summarised in Table 5.2. One of
the key areas was the development of research capacity via research training and research careers. It recognised that there was a shortage of experienced career researchers with well-developed career structures; this was seen as a major threat to the NHS R&D programme, and the report recommended that the NHS should undertake capacity building for research skills. As a result the NHS R&D Research Capacity Development Programme was set up, developed from the National Awards Programme, with an expansion of the awards schemes and the development of a national NHS R&D programme. By 2004, the National Portfolio of Research Capacity Support Infrastructure Contracts had reached 150 contracts valued at £13.85 million (Cotterill 2004).
Key area | Recommendations
--- | ---
Focus on needs and priorities | - Establish systems to clarify contributions from partners that support NHS research, especially the contribution made by HEIs to support R&D in areas such as public health, ageing and primary care.
- Clarify with these partners the role of the DoH and NHS in leading health services research (e.g. programmes of research to meet health and service needs and priorities).
- The DoH should maintain a rolling programme of reviews to establish research priorities.
- Development of the NRR and provide detailed information on health related research.

Research priorities | - Establishment of national research advisory groups in research priority areas to encourage comprehensive research across all health communities.

Common themes arising from the four review working groups | - The SDO programme should support the development of research methods for health service programme evaluation.
- R&D should be recognised as a major customer for IM&T.
- Investment in long-term research informed by information systems (such as case and disease registers).
- Involvement of consumers in every stage of the research process.

Quality assurance | - The DoH should explore ways to externally peer review programmes of research for which the Levy provides support.
- R&D provisions should be organised in research units, programmes and projects.

Wider health communities | - R&D funding should be provided for total health communities rather than single health service providers.
- Public health research of national interest should be integrated with research funded by the Levy.
- The DoH should promote ways of developing cross-departmental research programmes where these benefit public health.

Research capacity | - Capacity building should be focused on vital research skills that are in short supply and coordinate this with the MRC.
- Clear plans for developing research capacity, short and long term, should be part of all research portfolios.

Strategic operational issues | - R&D development partnerships (research projects, programmes and units with partners such as HEIs) should be funded.
- Annual reports on R&D activity and outcomes should be made widely available.
- Support should be given to develop and maintain a national network of R&D directors and managers.

Key to abbreviations: NHS = National Health Service, HEIs = higher education institutions, R&D = research and development, NRR = National Register of Research, SDO = Service Delivery and Organisation, IM&T = information management and technology, MRC = Medical Research Council.

Table 5.2 Main recommendations of the Strategic Review of the NHS R&D Levy (Department of Health 1999c pp 4-10)

The group also issued a report specific to primary care, where 85 percent of healthcare problems in the NHS are managed (DoH 1999e). A specific gap in the
evidence was recognised in primary care, from knowledge through to implementation. The report was unusual for a government document in that it made numerous recommendations about R&D roles and the needs of nurses, for example the need for small numbers of non-medical clinical researchers in primary care to develop their research roles (Rafferty et al. 2004).

Plans for taking forward the Clarke Report were outlined in 'Research and Development for a First Class Service' (DoH 2000b) and, as summarised in Chapter 1, R&D funding procedures were amended so that from 2001 trusts no longer had to bid for funds, but had them allocated on the basis of wider criteria including strategic plans, annual R&D reports, information on the National Register of Research and from other research funders, and expert advice on NHS R&D priorities. Funding for R&D was split into two systems: Support for Science (SfS) and Priorities and Needs Funding (PNF). The SfS budget was to meet costs incurred in supporting R&D, whilst PNF was to provide support for R&D over and above that supported by other funders, in order to underpin NHS modernisation and quality improvement. This included funds for NSFs, the National Performance Assessment Framework, priorities identified in National Priorities Guidance and NICE. It also set out three linked themes for generating knowledge: health of the population, research-based innovation and quality of care. The document acknowledged the problems with research capacity in certain disciplines, and stated that specific initiatives would follow to strengthen this. Total estimated expenditure on R&D funding in 2005/6 is £650 million (£250 million for PNF, £400 million for SfS budgets split amongst approximately 275 trusts in England (DoH 2005c)).
In March 2000 a workshop attended by NR leaders in York explored how the commitments made in 'Making a Difference' (DoH 1999a) might be implemented. The resulting report (DoH 2000a) set out professional and institutional barriers that impeded the impact of NR in the NHS. Rafferty argued at this workshop that nurses constituted the largest part of the NHS workforce - 70% of the wage bill and 40% of the total NHS budget - and that:

'... it might be argued that 40% of the R&D budget should be invested in research that impacts on their work.' (p1)

The main recommendations are summarised in Table 5.3. It can be seen, however, that these overlap strongly with those of the 1993 taskforce report (DoH 1993b) (see Chapter 1, p31). Rafferty et al. (2002 p245) stated that this prompted questions as to how far nursing R&D policy had actually changed within the seven year period since the original report was published, especially with regard to building NR capacity. Expectations may have been raised, but it had 'delivered little in tangible results' (Rafferty et al. 2004 p 27). At the time of writing there is still no formal NR strategy for England (Bellman 2005).
Key area | Recommendations
--- | ---
influencing the R&D agenda | • Establishment of a nursing research advisory group to develop, steer and evaluate the strategic actions proposed in the report

Strengthening NR workforce capacity | • The R&D workforce capacity implementation group should establish current capacity to address nursing issues in priority areas of NHS R&D, and also how to address deficiencies
• The R&D workforce capacity implementation group should develop proposals to pilot new and innovative career pathways and to explore how best to build capacity
• The DoH should establish time-limited awards for pre- and post-doctoral research training fellowships and career scientist awards
• The DoH should explore with HEFCE/other funding bodies potential for greater co-operation and coherence of investment
• The DoH should explore options for pump-priming a handful of designated centres with thematic R&D development programmes to build capacity through partnerships and collaboration, linking with NHS and service delivery

Implementing R&D findings | • Work being undertaken to implement clinical governance, establish the NeLH and improve research dissemination should take proper account of the needs of nurses

Key to abbreviations: R&D = research and development, NR = nursing research, DoH = Department of Health, HEFCE = Higher Education Funding Council for England, NHS = National Health Service, NeLH = National electronic Library for Health

Table 5.3 Main recommendations of ‘Towards a Strategy for Nursing Research and Development’ (Department of Health 2000a pp4-6)

However, in May 2002 HEFCE and the Department of Health agreed to establish a fund to increase the amount of high quality research for nursing and the AHPs. Awards for future research leaders, at doctoral and post-doctoral level, were announced as a result of the joint DH/HEFCE Task Group 3 study (HEFCE 2001). This found that NR and AHP R&D was historically under-funded, especially in comparison to other comparable professions such as teaching and social work, and benchmarked poorly against similar government investment in the USA and Canada, with a need to develop capacity.

The Task Group 3 study was divided into two parts: a mapping of research outputs and activity and a policy justification study outlining the business case for investment. It found that academic nursing and AHP departments had increased
research income over 50 departments from £3 million in 1996-97 to £9.7 million in 1999-2000. Funding was mostly from the DoH, NHS regional offices and NHS trusts. HEFCE funding accounted for another £3 million to 11 HEI departments for nursing following the 1996 research assessment exercise (RAE). Research staff in HEIs had increased in a five-year period from 97 to 240, but this was only 3.9% of the total staff of 6174 (Rafferty and Traynor 2004b). (The equivalents in Education were 7.6% and Social Work/Studies 13.3 %.) Published papers had increased over a ten-year period, although there was a substantial minority of authors from clinical practice. Seventy-three percent of nursing publications stated no funding source, with the implication that these projects were self-funded. In the NHS as a whole this figure was 47% (Rafferty and Traynor 2004b).

This new investment reversed the previous multidisciplinary policy in which nursing and AHPs were expected to compete for funding with groups with a more mature research base (Rafferty and Traynor 2002). Five main arguments were made for more investment in NR and AHP research. These were:

- Justifications based on the importance of the NHS to the nation
- Evidence that some demands for research were not being met
- A cost-benefit argument, showing that investment would pay off financially or in other terms
- Comparisons with other disciplines and countries
- Evidence that the quality and scale of the supply of research was not as high as it should or could be

(HEFCE 2001 p51).
Fourteen main recommendations were made. These, along with the joint response from the DoH and HEFCE, are summarised in Table 5.4 (HEFCE 2002 Annex A p1-3).

After the report was published, there was increasing investment in nursing and AHP research. A committee was established and funding streams were identified. The scheme has attracted:

'...an impressive pool of quality candidates at doctoral and post-doctoral levels.' (Rafferty and Traynor 2004a p213.)

In addition, in January 2003, HEFCE announced that £18 million was available for 2003-4 for university departments that scored 3a and 3b in seven emerging subject areas in the 2001 RAE, one of which was nursing (Rafferty and Traynor 2004b).
<table>
<thead>
<tr>
<th>Recommendation by Task Group</th>
<th>Response from DoH/HEFCE</th>
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<tr>
<td>1. HEFCE and the DoH should establish a fund to enhance the volume of high quality health related research</td>
<td>The DoH and HEFCE do not have funds to establish the fund. As a first step they will identify potential funding from existing streams to develop capacity. They hope to establish a targeted line of funding which would continue for the envisaged seven year period when detailed results of the current government spending review are available</td>
</tr>
<tr>
<td>2. There should be a seven year minimum period for additional funding to be channelled through the new fund</td>
<td>A committee will be convened to advise on the processes, programmes and priorities to which the DoH/HEFCE might direct funds. It will advise on further needs and adjustments necessary to continue capacity building. It will form the selection panel for the personal award scheme and recommend how funds are distributed</td>
</tr>
<tr>
<td>3. A board of nominees from the funders should oversee the set-up and direction of the fund. This board would review processes, programmes and priorities of the fund and nominate peer reviewers. It would monitor the need for research and the development of capacity and adjust funding accordingly</td>
<td>The DoH and HEFCE are already working together to provide a joint initiative and will involve the Research Councils and charities</td>
</tr>
<tr>
<td>4. HEFCE and the DoH should enter into discussions with other funders to establish mechanisms for coordinating investment in health professions research</td>
<td>The joint initiative will need to have end points and milestones. Monitoring will take place against these agreed parameters.</td>
</tr>
<tr>
<td>5. The board should report half way through the funding period on the research to enable HEIs to plan areas of research and provide stakeholders with an account of researchers and research groups</td>
<td>This recommendation is outside the remit of the DoH R&amp;D division or the HEFCE. However, the DoH R&amp;D division will ensure that the Review of Non-Medical Contract Benchmark Pricing and Attribution Committee is aware of the proposal</td>
</tr>
<tr>
<td>6. WDCs should be mandated to support research training for teachers in HE and aim to ensure all teachers in HE possess research degrees in the long term. Support for research training should cover full costs of providing staff with study leave</td>
<td>It is agreed we will encourage research training partnerships between NHS organisations and HEIs</td>
</tr>
<tr>
<td>7. NHS units should work closely with HEIs to develop research training partnerships</td>
<td>HEFCE has agreed any funds it can provide will be available for such a purpose and that it will look to the advisory board to make detailed recommendations on implementation</td>
</tr>
<tr>
<td>8. The fund should support HEIs in providing opportunities to study for research degrees for academic staff in HEIs whose posts are not funded for teaching, to include study leave.</td>
<td>The DoH and HEFCE support this recommendation</td>
</tr>
<tr>
<td>9. Means to enhance research capacity should be examined, for example funding post-doctoral research posts, sabbatical leave to enable engagement in research, senior research posts including professorships especially where research capacity is inhibited by a lack of research leaders in particular areas.</td>
<td>The DoH and HEFCE support this recommendation</td>
</tr>
<tr>
<td>10. HEFCE and the DoH should ensure the fund supports innovative approaches to the creation of roles straddling academia and practice</td>
<td>The DoH and HEFCE agree that this should be one of the terms of reference for the advisory committee</td>
</tr>
<tr>
<td>11. The board should consider proposals for developing interdisciplinary research capacity within the professional disciplines but should not consider funding proposals which exclude nurses and AHPs.</td>
<td>The funding bodies view this as a long-term but finite scheme that will need to gather momentum over a period of time. The performance targets will need to recognise this development trajectory</td>
</tr>
<tr>
<td>12. The funding body should consider these proposals as a starting point for discussion about how such a fund should be distributed and administered</td>
<td>The funding bodies will consider how best to support research networks in this field. Several already exist, having been pump primed and/or supported by the DoH R&amp;D division</td>
</tr>
</tbody>
</table>

Key to abbreviations: DoH = Department of Health, HEFCE = Higher Education Funding Council for England, HEIs = higher education institutions, WDCs = workforce development confederations, R&D = research and development, NHS = National Health Service


In 2004, HEFCE outlined the latest funding situation. The DoH research capacity building programme provided £25 million (£11.4 million for personal awards and £13.6 million for infrastructure). The HEFCE contribution was £2.5 million for
nursing and £4.6 million for AHPs via the research capability fund, and mainstream HEFCE funding from the quality review for the year 2004/5 was £5 million for nursing and £17 million for AHPs (Freda, HEFCE conference presentation 7 June 2004).

A consultation exercise followed to address research priorities in nursing and midwifery. This was carried out by the Nursing And Midwifery R&D subgroup of the National Coordinating Centre for NHS Service Delivery and Organisation (NCCSDO 2003). (The Service Delivery And Organisation R&D theme emerged as part of the priorities and needs funding stream with the reorganisation of R&D funding (DoH 2000b).) The exercise consisted of three strands: focus groups with service users, semi-structured telephone interviews with a wide range of stakeholders, including clinicians, other HCPs, managers, researchers and policymakers, and a literature analysis of policy documents, selected papers and published reports. Five notable priority areas for research were identified:

- Appropriate, timely and effective interventions
- Individualised services
- Continuity of care
- Staff capacity and quality
- User involvement and participation.

The report concluded that the nursing and midwifery subgroup should seek to commission a programme of research which met ten key objectives, outlined in Table 5.5.
**Nursing and midwifery research programme key objectives**

<table>
<thead>
<tr>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To lead the development of evidence-based, cost-effective interventions and care giving practices in line with service-users expectations.</td>
</tr>
<tr>
<td>2. To support theoretical development and generalisable knowledge through coherent programmes.</td>
</tr>
<tr>
<td>3. To produce nationally or internationally significant evidence for interventions and care-giving practice in relation to patient/carer, community, professional, organisational and economic outcomes.</td>
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<tr>
<td>4. To inform policy and build cost-effective models of nurse-led, user-centred services and pathways of care.</td>
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<tr>
<td>5. A high scientific-merit programme using appropriate methodology, or to support methodological development where necessary, including the development of outcome measures for intervention studies.</td>
</tr>
<tr>
<td>6. To value and utilise collaborative approaches in terms of research skills, academic disciplines and with service partners, to build research capacity and capability.</td>
</tr>
<tr>
<td>7. To involve users, where appropriate, and provide feedback to participants about their involvement.</td>
</tr>
<tr>
<td>8. To evaluate the strategic dissemination of research findings/best practice within health and social care settings in relation to user, professional and organisational outcomes.</td>
</tr>
<tr>
<td>9. To be cost-efficient, feasible and show realistic objectives and deadlines.</td>
</tr>
<tr>
<td>10. To complement research being carried out by the SDO programmes as a whole.</td>
</tr>
</tbody>
</table>

Key to abbreviations: SDO = Service Delivery and Organisation

**Table 5.5 Key objectives of nursing and midwifery research programmes**
(National Coordinating Centre for Service Delivery and Organisation 2003 p10-11)

A programme of research has now been established, with a specific SDO funding stream. The SDO website lists commissioned projects; to date (20 June 2005) six projects have been commissioned, totalling £791,166, with a further three listed as planned (SDO 2005).

Despite this investment there is still concern at the perceived lack of recognition of nursing as an entity in its own right. This has an impact on NR funding and on nursing setting its own research agenda (Thompson and Watson 2004).

Thompson and Watson point out that nursing is increasingly being adsorbed into 'multidisciplinarity' (p911) along with AHPs, but leaving medicine as pre-eminent and independent. Nursing departments in HEIs have disappeared into 'health', 'healthcare', 'health sciences', 'health studies' and 'health and social care', which is 'unique in the UK' (p911). In North America, for example, faculties of nursing exist alongside faculties of medicine and allied health. Thompson and Watson also believe that NR is in a perilous state and that:
'collaboration with the multidisciplinary agenda means that they rarely fund research which is purely about nursing or even about nursing issues in collaboration with cognate professions – i.e. interdisciplinary research.' (p911)

Rafferty and Traynor (2004b) acknowledge the achievements brought about by this investment. However, they also warn that there is still a long way to go to remedy the deficits of the past, and emphasise that nursing should not be complacent about progress; policy may revert back to prior structures at the end of the ten year life of the current project.

In 2001, the government released details of new governance arrangements for R&D (DoH 2001a). The research governance (RG) framework is outlined in Figure 5.1 below (DoH 2001a p5). The conduct and management of research was to undergo a huge change, with organisations responsible for meeting national requirements for monitoring research and ensuring that it met national quality standards, and individuals undertaking research responsible for managing this to national standards and ensuring that they were continually trained and updated to do so.
Participants and research partners

Learning networks

Effective Management of research to national standards

Continuing training and education in research management

Monitoring of research
Standards-based assessment
Statutory inspection
Adverse events reporting

Clear national standards for health and social care research

Dependable local delivery of research

Monitored research standards

Figure 5.1 Research governance framework for health and social care – what the research governance framework means for participants (Department of Health 2001a p5)

Table 5.6 gives a summary of key responsibilities (DoH 2002a p1). This framework was implemented over a three-year period, with newer trusts such as PCTs given additional time to set up systems due to their emergent status (DoH 2001d).
<table>
<thead>
<tr>
<th>People/organisations</th>
<th>Key responsibilities</th>
</tr>
</thead>
</table>
| Principal investigator and other researchers | - Developing proposals that are ethical and seeking REC approval  
- Conducting research to the agreed protocol and in accordance with legal requirements and guidance e.g. on consent  
- Ensuring participant welfare while in the study  
- Feeding back research results to participants                                                                                                                                                                                                                                                                                  |
| Research ethics committee                   | - Ensuring that the proposed research is ethical and respects the dignity, rights, safety and well-being of participants                                                                                                                                                                                                                              |
| Sponsor                                     | - Assuring the scientific quality of proposed research  
- Ensuring REC approval is obtained  
- Ensuring arrangements are in place for the management and monitoring of research                                                                                                                                                                                                                                                             |
| Employing organisation                      | - Promoting a quality research culture  
- Ensuring researchers understand and discharge their responsibilities  
- Taking responsibility for ensuring the research is properly managed and monitored where agreed with sponsor                                                                                                                                                                                                                     |
| Care organisation/ responsible care professional | - Ensuring that research using their patients, users, carers or staff meets the standard set out in the research governance framework (drawing on the work of the REC and sponsor)  
- Ensuring REC approval obtained for all research  
- Retaining responsibility for research participants' care.                                                                                                                                                                                                                                                                       |

Key to abbreviations: REC = research ethics committee

Table 5.6 Research Governance: summary of key responsibilities of people and organisations (Department of Health 2002a p1)

More recently, the RG framework was updated by the DoH (2005d). This was in response to changes in the law such as the Human Tissue Act 2004, Mental Capacity Act 2005 and Medicines for Human Use (Clinical Trials) Regulations 2004. It also further clarified the role of ethics reviewers, research reviewers, funders, sponsors, host organisations and chief investigators in light of these legal changes.

Changes to the operation of NHS RECs (DoH 2005a) have now been recommended to try and remove unnecessary overlap between RG procedures and REC review – REC reviews should not reach decisions based on scientific quality of the proposed study but should assume that it has already been peer-reviewed as part of the process, and concentrate on the ethics aspects. It also
recommended that survey research, service evaluation and research on NHS staff do not need ethics review, and that LRECs need not be involved in multi-centre studies where approval for the wider study has already been obtained: local approval can be given by the host organisation. Recommendations were also made to reduce the number of RECs, with more intense operation of those remaining and consideration of remuneration of committee members, who at present give their time voluntarily. Finally, it was recommended that there should be more harmonisation of governance arrangements to develop a UK-wide system in which there is a combined ethics/R&D system that brings together the information needed in one standard format.

The government has recently announced a proposed reorganisation of NHS research programmes, funding and structure (DoH 2005b). A virtual National Institute for Health Research is planned to bring together all elements of NHS/DoH research, with funding from the NHS R&D budget to provide world-class research. It will have a faculty of senior investigators, faculty associates and junior investigators. Research funding will ‘follow patient involvement in health studies’ (executive summary p9) and replace the SFS process of funding allocation. Commissioning and management will be consolidated into a central business support unit. Academic medical centres will be competitively selected and linked, research networks created and technology ‘platforms’ in selected NHS organisations created. New funding schemes are proposed, along with an expansion of NHS research programmes. These proposals are currently at the consultation stage, which closes on 21st October 2005 and aim to provide better support for researchers, provide NHS organisations with necessary support and infrastructure and to strengthen research programmes especially in areas
identified as important but neglected or under-funded. Cole (2005) comments that proposals have so far been given a broad welcome from research bodies such as the MRC but that providing world-class research leadership will be a 'daunting battle' (p368) and questions whether the proposals will go far enough in tackling the problems of applied research, which he describes as in 'crisis' (p368). The commitment to patient-centred research may benefit NR activity but the outcomes of the consultation are, as yet, unknown and Cole (2005) warns of how the proposals will challenge very entrenched vested interests in industry and the academic world.

This review of government policy will be concluded with a brief overview of the work of the Centre for Policy in Nursing Research (CPNR). As seen in the review of the literature on government policy, many commentaries on this were produced by the CPNR, led by Anne-Marie Rafferty and Michael Traynor. The establishment of this independent centre in 1995 was a joint initiative between the London School of Hygiene and Tropical Medicine and the Royal College of Nursing; funding came from the Nuffield Provincial Hospitals Trust (Mead 1996). Rafferty was the director and Traynor a lecturer in the centre. The centre was established with the intention of developing a co-ordinated strategy for NR by identifying needs for research in nursing and specific needs of nurse researchers, in response to the Task Force on Nursing Research report (DoH 1993b) which, as reviewed in Chapter 1, recognised that NR was fragmented, lacking a clear strategy and vision, and isolated from the wider body of health research. The main aims and objectives of the centre are summarised in Table 5.7.
In addition to providing an independent voice on NR policy, Rafferty and Traynor have been active members of many DoH reference groups (Centre for Policy in Nursing Research 2001) and the lobbying remit and outputs of the centre can be surmised as contributing to and influencing the policy changes seen over the last five years. The centre finished its work at the end of 2004, having achieved its main objectives.

<table>
<thead>
<tr>
<th>Centre for Policy in Nursing Research Aims and Objectives</th>
</tr>
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<tbody>
<tr>
<td>1. Identify and articulate key policy concerns in nursing research and formulate and prioritise policies for research in nursing</td>
</tr>
<tr>
<td>• Papers on NHS R&amp;D context</td>
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<tr>
<td>• Papers on HEI context</td>
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<tr>
<td>• Information on nursing PhDs</td>
</tr>
<tr>
<td>• Nurse-led R&amp;D on national research register</td>
</tr>
<tr>
<td>• Nursing research papers on the Wellcome Trust’s research outputs database analysed</td>
</tr>
<tr>
<td>2. Facilitate discussion and collaborative activity between nurse researchers and other healthcare researchers</td>
</tr>
<tr>
<td>• Monthly evening seminars</td>
</tr>
<tr>
<td>• Nursing research symposia</td>
</tr>
<tr>
<td>• Interdisciplinary research collaboration in the centre</td>
</tr>
<tr>
<td>• Recommendations for the training and career structure of the NR workforce</td>
</tr>
<tr>
<td>• Presentations at nursing educational conferences</td>
</tr>
<tr>
<td>• Presentations at clinical nursing research conferences</td>
</tr>
<tr>
<td>3. Identify national research priorities as the basis for the formulation of research programmes</td>
</tr>
<tr>
<td>• Collaborate with the RCN on national research priority setting exercise</td>
</tr>
<tr>
<td>4. Undertake a limited amount of research and teaching</td>
</tr>
<tr>
<td>• Research outputs on policy and strategy</td>
</tr>
<tr>
<td>• Teaching and educational remit</td>
</tr>
<tr>
<td>• Membership of working groups</td>
</tr>
</tbody>
</table>

Key to abbreviations: NHS = National Health Service, R&D = research and development, HEI = higher education institution, PhD = Doctor of Philosophy, NR = nursing research, RCN = Royal College of Nursing

Table 5.7 Aims and objectives of the Centre for Policy in Nursing Research (Centre for Policy in Nursing Research website, 2001)

Summary

In summary, it can be seen from the literature on government policy for NHS R&D that wide-ranging changes to the organisation, management and support of NHS R&D activity have occurred, especially over the last decade. At first there was little focus on nursing research as an entity, with the emphasis on medical and multi-disciplinary research. However, more recently there has been a review of research capacity and funding for NR and AHP research which has led to national
investment in capacity building and some national funding for NR priority areas. It remains to be seen what impact this investment in NR will have on knowledge generation, nursing as a research-active profession and patient/client care. The scheme runs for a limited time and there is no guarantee that investment will be maintained in the future. There are concerns about the longer-term development of NR and the need to sustain current momentum.

**Organisational support strategies**

As NHS organisations have increasingly put RG requirements into place and developed their research support strategies, more papers have appeared in the nursing journals about mapping NR activity and developing NR support strategies. Six primary research or audit papers were found reporting studies carried out in individual organisations, plus two non-research papers. Seven primary research papers were also found which studied large-scale mapping exercises or development and evaluation of R&D initiatives on a county, regional or national scale, plus one national position paper from the RCN on promoting excellence through R&D. Papers were evaluated using a structured approach adapted from Woodward and Webb (2001). This considered aspects such as aims, study design, sampling, response, outcomes and rigour. (For non-research papers, evaluating aspects such as rigour were not possible; however, the project aims and outcomes were entered to enable comparison.)

Papers from individual organisations will now be reviewed. These addressed three main areas: mapping ongoing or completed research, capacity building or developing strategies for supporting NR.
**Mapping ongoing or completed research**

Tanner and Hale (2002a) and Smith et al. (2004) mapped the amount of ongoing NR undertaken in individual trusts. Tanner and Hale visited 79 wards in an acute trust to identify research active nurses, and carried out interviews and focus groups. The trust R&D database was searched and interviews were also carried out with senior nurse managers. Their definition of research active was having carried out a research project independent of an educational course which had resulted in a publication. Thirty-four nurses were identified as independent researchers (although only 14 of these had published). This was 2.1% of nurses in the trust. The project was undertaken using ‘snowballing’ to identify the sample, a method recommended for hard-to-reach groups (Streeton et al. 2004), and by using the trust’s database of known researchers. However, it is possible that these methods may have missed some active researchers that a survey sent to all staff may have found. There was also potential for omission of researchers in view of the very narrow definition of active researchers, for example, students doing postgraduate degrees for Master’s awards and PhDs. Smith (2001) argues that publications alone should not be the sole measure of the quality and value of research, but that changes to healthcare practice should be the main criteria because:

> 'The main aim of research is to improve the health of people.' (p323)

These limitations are acknowledged by the authors, who provide a rationale for their strict criteria.

Smith et al. (2004) studied recent trends in undergraduate nursing research in a district general hospital before and after the introduction of research governance.
They used the trust's R&D database, written protocols and REC approval letters to gather information and identified 22 projects pre-RG, which fell to nil post-RG implementation. For the 22 projects they were able to identify 14 individuals still working in the trust, and sent them a questionnaire asking for project details. Only 5 staff responded but overall results including the analysis of proposals and database showed that 68% of research concerned staff and 32% concerned patients. Eighty-six percent used survey methods and 95% were descriptive. Most did not address national R&D priority areas. Limitations of the study include the possibility of missed projects: before the introduction of RG, records were not always held centrally of R&D activity unless they were funded projects, and projects not involving patients frequently did not go through RECs. No description was given of how the questionnaire was devised or tested for reliability and validity, and piloting was not mentioned. The low response rate (23%) means that results cannot be generalised. The authors do not say whether the lack of research projects post-RG introduction coincided with any change in HEI policy on undergraduate research projects, although they imply a change in focus to critical appraisal rather than research. If this were the case, the HEI might have abolished primary research projects within undergraduate programmes and this, not RG, would account for the lack of projects found after RG was implemented. This is not discussed or addressed in the paper, which means that the findings may result from other factors and the conclusion that RG can suppress research activity may be erroneous.

Despite the limitations of both studies, the findings that there were few research-active nurses are similar to the earlier mapping results reported in Chapter 4 (e.g.
Bartlett et al. 1997, Kitson and Currie 1996 and the results of Phase 1 of this study).

**Capacity building**

A paper (Bryar 2003) evaluated a three year strategy for research capacity building undertaken in a primary care development unit attached to one HEI. Longitudinal case study research was used to evaluate the development of research skills of clinical fellows appointed on three year honorary contracts to the unit. (Fellows were from a variety of primary care disciplines but 19 out of 35 were nurses, midwives or health visitors.) Bryar’s research methods were interviews, questionnaires and document analysis at three months, three years, and then five years after the completion of the strategy. The results showed considerable research skills were built and the ‘development’ arm of R&D was especially improved in those on short-term contracts, who carried out projects in their clinical areas. Many participants went on to do higher degrees such as Masters and PhDs. However, primary care employers did not use these R&D skills on return to the practice area, unless participants moved to new jobs where they were specifically required (in these cases, extensive use was made of these skills). This caused some frustration among participants and 13 of the original 35 had moved jobs. The paper provides little discussion on rigour for any of the methods of data collection, for example the process of questionnaire development and qualitative data analysis are only briefly mentioned. The discussion section was very short, with little reference to other studies, which made it difficult to place the findings in the context of other work in the area. However, the main message to emerge was that capacity building can produce very good results in developing individuals, but
that the NHS needs to recognise acquired skills and enable practitioners to use these in practice if the capacity building programme is not to be wasted.

**Developing strategies for support**

Five papers were found that looked at support systems in individual organisations. Three (Robinson 1999, Henderson 2004 and Parkin and Bullock 2005) evaluated the impact of new trust initiatives to support NR, and two (Carnwell et al. 2004 and Jinks and Green 2004) examined the potential for developing a joint NR strategy with the local HEI.

Robinson (1999) described how one acute children's hospital introduced key initiatives to promote NR: a survey of nursing staff, introduction of shared governance, introduction of joint academic/clinical lecturer appointments and pump-primed funding for NR activity. (Robinson describes shared governance as a management system, originating in the United States in the 1970s, which allows professional nurses to be involved in the decision-making processes of an organisation.) The survey, to determine levels of interest and experience in NR, only had a 10% response rate and could not therefore provide valid findings. It did, however, allow for the identification of a few interested individuals with a desire to move NR forward in the trust, who then attended educational sessions in research techniques and critical appraisal. Shared governance led to an R&D nursing council; this dealt with original NR projects and appraised existing research, providing facilitation and support for individuals wishing to carry out research or implement findings. Also implemented was the joint appointment of a full-time lecturer with a remit for R&D support and development of NR activity. Funding for projects was made available via an internal quality improvement fund which
accepted bids for research activity that was relevant to improving care. Shared governance enabled nurses to gain confidence in their ability and gave them the power to introduce change, provided they could demonstrate the evidence base to support it. The initiative has since led to the development of over 20 projects, ranging from small ward-based research to involvement in international projects.

Henderson (2004) reported the results of a strategy to develop a research infrastructure for midwifery in one women's healthcare trust by promoting a culture of EBP, encouraging practitioners to undertake/ participate in research, and foster multi-professional research collaboration. The project had two phases. Phase 1. identified factors contributing to or inhibiting evidence-based activity via a survey which mapped R&D activities and established experience, skills and perceived barriers. Phase 2. developed a model to increase evidence-based activity via identification of staff development needs, practice review groups, and a robust communication strategy. The survey of 194 midwives produced 123 responses (63%). Results found that 20% of midwives were participating in research studies. Many used research findings to change practice. Guidelines and protocols were seen by some as being out of date, not evidence-based and not informed by clinicians, with no process of review. Organisational barriers to EBP of lack of time, support, and resources were identified, along with lack of co-operation between staff, especially with medical staff. The volume of research, and problems appraising this, was also seen as a barrier. Recommendations were for the identification of key people to actively coordinate evidence-based activity, a multi-professional forum for developing and reviewing guidelines, and the appointment of an R&D midwife in the R&D unit, along with improved resources such as computers, a central trust R&D register and a database of midwives doing
academic studies to capture the work done on courses. The detailed design of the questionnaire was not reported and therefore rigour cannot be established. However, Henderson reported that changes were made, and a research nurse appointed, which led to changes in attitudes. However, she stressed that cultural change takes time and commitment and is a long-term process.

Parkin and Bullock (2005) report the audit of a clinical benchmark standard for monitoring and support of NR and the impact of the standard in an NHS trust. A questionnaire was sent out by the Nursing Research Unit (NRU), which had devised the standard, to a purposive sample of nurses directly or indirectly involved in research. Total numbers distributed were not stated but 202 responses were received. The majority of respondents were aware of the role of the NRU in the trust, and 71 nurses reported receiving advice on the research process. All nurses undertaking research had requested support from the unit. All nurses who had completed projects had disseminated their results both locally and externally. All R&D link nurses felt supported by the NRU, and 78% of clinical nurses had used research literature to inform practice in the last six months. The report was described as an audit, and rigour was difficult to assess: the questionnaire design was not discussed, and the sample selection procedure not given. The means of dissemination of research findings was not stated, i.e. whether it was by conference, network groups or publication.

Despite the fact that two of the above papers were not primary research and the third gave no details of project design and therefore rigour was impossible to assess, all three papers gave an experiential account of how the introduction of a more structured, formal approach to nursing/midwifery R&D yielded beneficial
results in the use of support systems and the carrying out, use of, and/or dissemination of research. These accounts gave additional insight into how organisations might support and guide NR activity.

The remaining two papers about individual organisational strategies considered how NHS trusts might develop an R&D strategy with their local HEIs. Camwell et al. (2004) used an action research (AR) approach to investigate developing a joint NR strategy in order to standardise RG arrangements and develop research capacity between organisations. This was a pilot study, with the aim of involving other stakeholders if successful. A strategy working group was set up, and an analysis of strengths, weaknesses, opportunities and threats (SWOT) was undertaken for each organisation, with an agreement of common interests and needs. A review of the literature pertaining to other joint strategies was performed. A database of research activity was developed. Evaluation tools for the strategy were agreed: these were to be minutes of R&D meetings, written reports of ongoing research activity, and the database records of research. The aims, objectives and targets of the strategy were agreed as a result of this process. Unfortunately the second stage of the AR (implementation of the strategy) was delayed due to funding and workload issues, but plans were ongoing to try and continue the implementation.

Jinks and Green (2004) also undertook a SWOT analysis to compare and contrast features of NR in a clinical and academic setting in order to develop a collaborative NR strategy. The NHS trust was a large teaching hospital trust, and the HEI was a post-1992 university with a Faculty of Health Sciences. The SWOT analysis found that both institutions had problems with research capacity and
capability, but both had good research infrastructures with an opportunity for joint working. A joint appointment had been made of a Professor in Acute Care Nursing and a further one in midwifery was planned. It was recommended that a joint strategy should be developed that concentrated on strong research leadership to maintain an effective NR culture and infrastructure, and that more capacity building via education and funding would need to be incorporated into the strategy. Increasing funding for NR would be an important focus, with joint lobbying at a local and national level.

These two papers showed that joint initiatives between trusts and HEIs can be developed and that both types of organisation may have similar problems with regard to research capacity and capability. The processes were time-consuming and had implications for workloads. Nevertheless, there was commitment to take the work forward, although this had not been done at the time the papers were written.

**Large-scale projects to develop NR activity**

Reports of large-scale projects will now be reviewed. Seven papers were found that reported these. Three (Browne et al. 2002, Meyer et al. 2003 and Davies et al. 2002) looked at research potential and ways of encouraging NR activity. Two papers (Sarre 2003 and Campbell et al. 2002) reported large-scale projects mapping research activity. One (Traynor et al. 2001) reported an analysis of published UK NR to establish the focus of NR interest, establish journal esteem ratings and ascertain funding levels. The final paper (Royal College of Nursing 2004) was a national position statement from the RCN on how to promote excellence in care through R&D.
Browne et al. (2002) surveyed the nature of lead R&D nursing posts in acute NHS trusts in two regions by sending a questionnaire to 52 organisations. (Nursing R&D leads were initially identified via telephone interviews with Directors of Nursing Services.) Thirty-four (65%) R&D leads responded, and 31 responses were usable. It was found that the 31 respondents had 17 different job titles. Forty-eight percent had posts specific to R&D, but only 23% were purely for nursing research. Most posts had been established in the previous three years, and 77% of post-holders worked full-time. Nearly half (46%) were funded from trust budgets, but only 13% were funded directly from R&D support funding. Only 19% of respondents were active in primary research themselves, and only a third had formal links with an HEI. Their primary role was the facilitation of others. Obtaining research funding was the least successful part of their roles. Most stated that their career intentions were unknown, with only four wishing to pursue a career in NHS R&D. Respondents stressed a lack of resources and problems stemming from a medically-dominated culture. The authors concluded that there was wide variation in the nature of the role and lack of a coherent approach, which could threaten the nursing contribution to NHS R&D agendas. Limitations of the report were that little information was given on how the questionnaire was devised or rigour ensured, other than that piloting took place. The discussion did not draw on other literature to inform the debate, and the authors therefore missed an opportunity to contextualise their findings within the wider research arena.

Mayer et al. (2003) described an action research project to co-ordinate seven nursing R&D posts to promote EBP for older people in a range of settings. Seven NHS organisations took part, and the posts concentrated on the ‘D’ aspect of
R&D, with the aim of improving practice based on the available evidence, but also on building research and appraisal skills in the lead nurses, who all undertook a research project. Recognised pre-validated tools were used to measure outcomes of change, together with interviews, focus groups and document analysis. Positive changes were recorded over time by the change measures and other benefits were recorded in interviews, such as a raised profile of older people, more attention for complex and special needs, more organisational support and better links with HEIs. The lead nurses reported gaining many research and management skills. However, they found it difficult subsequently to engage in research themselves, and were often seen as 'outsiders' in the organisation. Most organisations lacked a research culture and the job was regarded by many post-holders as frustrating and stressful to the extent of affecting their health and well-being. Some described feeling like a 'punch bag' (p413), and several did not see the experience as valuable in enhancing their careers. Only one remained in a lead R&D role on completion of the study. The paper concentrates mostly on the issues which arose for the R&D nurses; therefore assessing the validity of findings of positive change was not possible. However, the report of issues faced by R&D nurses made ample use of quotations from them, and gave a fascinating insight into the challenges facing nurses undertaking this type of role in NHS organisations.

Davies et al. (2002) assessed levels of interest in, and priorities for, research amongst general practice nurses (GPNs) in five health authorities, and explored factors facilitating and impeding the development of NR in this group. The methods used were a survey of 1054 GPNs (response rate 40%), and 55 interviews with individuals or via focus groups. The results showed that half of
respondents were interested in undertaking research, a third had participated in research and 20% had initiated their own research. Practice nurses educated to graduate level, those working in nurse training practices or those participating in external research were most likely to want to undertake research. Working in a medical training practice was a negative predictor of research interest. Priority areas for research were mostly identified as long-term health problems present in the local population. Barriers to undertaking research were cited as lack of time, resources and support. GPNs interested in research wanted to improve services, develop their careers, make their work more interesting and/or reduce isolation.

The limitations of the study were mostly acknowledged. Questionnaire development was described, and was around themes identified from the literature. However, although the questionnaire was piloted, other means to ensure rigour were not described, and the trustworthiness of qualitative data was not addressed. One table was confusing, with mean values described as totals, which detracted from the presentation. Despite these limitations, the paper was an informative report of the research potential of clinical nurses and the perceived barriers that could impede research, and was able to identify priority areas for practice-based research.

These three papers considered varying aspects of NR in the wider clinical setting, over several organisations or areas. The first two assessed the role of R&D lead nurses, and both reported difficulties with aspects of the role such as the difficulty in post-holders undertaking research themselves, perceived problems with career prospects and lack of organisational recognition of nursing research as an essential part of their roles. The third paper also reported that practitioners perceived barriers to undertaking research, although half of respondents were
interested in doing this. Practitioners in two of the studies (Meyer et al. 2003 and Davies et al. 2002) were able to identify areas of practice where research was needed and, in the paper by Meyer et al. (2003), R&D nurses were able to facilitate the implementation of evidence into practice. In summary, these papers all report how nurses could develop roles that incorporate or facilitate R&D activity, but all also report some inherent difficulties with this process.

The two papers by Sarre (2003) and Campbell et al. (2002) both considered support processes and identified research activity over a wide geographical area amongst a range of healthcare professionals, including nurses.

Sarre (2003) interviewed PCT R&D leads in 39 organisations in one area with the aim of identifying research activity and capacity and identifying what support was needed for researchers. The interview schedule was based on an established organisational change management model, and a profile of R&D arrangements in primary care was then compiled. This included levels of activity, infrastructure, collaborations and progress with RG implementation. Six main categories emerged where support was needed: implementing RG, developing partnerships with HEIs and other NHS and social care organisations, access to research training and expertise, strategic development and leadership, capacity building and increasing research activity, and accessing information/building networks. Rigour was impossible to establish as no account was given of how this was achieved, and no description of the analytical processes other than a chart of emerging themes.
Campbell et al. (2002) mapped health and social care research in one county of England to develop a database of researchers, identify cohorts of research active professionals, record research activity, inform RG processes and develop a strategy of capacity building for future research. The study was mixed-method: a survey was used initially to send a questionnaire to researchers, distributed both on-line and by hard copy to a sample of researchers identified by a snowballing technique. The questionnaire was in two parts: the first gathered demographic and personal information about research skills, whilst the second requested information about specific projects. There were 247 respondents (the total number who might have received the tool could not be identified as the questionnaire was available on-line). The results were used to inform the development of interview topics. Semi-structured interviews were then held with 23 individuals representing all healthcare professions and results compared to the results of the survey and to other literature on the topics. Nurses, midwives and health visitors were interviewed, along with other health and social care professionals. The main outcome was that a detailed picture of research skills and levels of support available in the county was obtained. It was found that support was more easily available in the acute sector of the NHS, and financial support for training and conferences was poor in primary care. Library and IT services were particularly poor in non-NHS sectors. The authors concluded that more research skills were needed across the board, and that available research skills and expertise were not being fully utilised. The project report was thorough and detailed, with a very clear account of rigour for all stages. It is acknowledged by the authors that the mapping might be incomplete due to the sampling strategy; whilst snowballing can access ‘hard-to-reach’ groups, as previously discussed, it may not have reached all those conducting research in the county.
These two papers, whilst not exclusively concerned with NR, provided accounts of organisational issues of support for R&D that may affect nurses. The issues of capability and capacity emerged in both papers, and these were not limited to NR, but affected other HCPs as well. Both studies worked with multiple organisations over a large area, which yielded valuable information about R&D support in general.

Traynor et al. (2001) undertook a bibliometric analysis of NR published in the Wellcome Trust's Research Outputs Database (ROD) between 1988 and 1995 with the aim of establishing the focus of research interest by exploring whether or not there was a fundamental split between 'endogenous' research (into problems and issues to do with nursing as a profession) and 'exogenous' research (into problems and issues concerning the nursing of patients) (p212).

They undertook a document analysis of 1845 NR papers (less than 1% of the total papers on the ROD) using bibliometric techniques, a quantitative approach using computer databases. Analysis revealed that NR was one of the six most rapidly expanding subfields within biomedicine and one of the fastest growing areas of development, with the UK the most rapidly expanding producer of nursing publications. However, NR was atypical of biomedical research as a whole, with highly esteemed papers having fewer authors and being less likely to have acknowledged funding (less than 20%). However this seemed more marked in the endogenous research (950 papers); exogenous projects (888 papers) had different characteristics and were more likely to have attracted funding (40% or more), and more were multi-authored but were published in lower-rated journals.
The main limitation of the study is that papers were not read individually and were classified by computer read-codes. The authors acknowledge the possibility for error using this process, and for this reason do not draw definitive conclusions. This paper gave a useful overview of published NR outputs, the growth of NR publications and the focus of NR papers.

The final paper to be reviewed in this section on organisational influences is a position statement from the RCN on how to promote excellence in nursing care through research and development (RCN 2004). The aim of the project was to consider how to expand the nursing knowledge base, extend R&D capacity and capability, and identify and develop a culture that values, promotes, sustains and rewards R&D in nursing. A working party of nurses with an interest in NR development met on several occasions to develop a draft position statement. Members of the group (of which I was one) were all nurses and included representatives from the NHS, HEIs, the RCN and the Foundation of Nursing Studies (FoNS).

When the draft position statement was developed, a consultation exercise followed in which it was distributed nationally to NHS nurse executives, HEIs, the Department of Health and to practitioners via the RCN website, asking for responses. Focus group discussions were also held at RCN congress and the RCN international research conference (personal experience from facilitating discussions). Examples of excellence in NR and organisational support of NR were sought, and outstanding work was summarised in the final position statement for practitioners to evaluate. The outcome of the project was the production of the final position statement, which acknowledged a shortfall in NR to inform practice.
and recommended that these gaps were identified and the knowledge base
developed. It also stated there was much good practice that needed evaluating
and disseminating in order to benefit the wider population, and that NR standards
should be the same as those expected of any other professional group.
Development was seen as of equal value to research: practice could not advance
without both arms. R&D should be seen as a legitimate nursing activity and a
supportive culture provided to achieve this. Finally, the statement recognised that
a range of stakeholders need to be committed to this: nurses, R&D funders, HEIs,
the RCN, FoNS, NMC and service users. Issues arising from the position
statement include where to go with it next: the working party recognised that
further work would be needed to support organisations interested in developing
R&D in their organisations, and funding would be needed to make this happen. In
addition, working party members discussed the possibility of an accreditation
scheme with the RCN for organisations to subscribe to: this was rejected at that
time in view of the amount of time and administration that would be imposed on
NHS organisations in a time of great organisational change with the
implementation of RG procedures (personal notes from working party meetings).
However, it may be a possible route for the future. Work is ongoing with this
project.

The literature on organisational support has shown that capacity and capability
issues in nursing R&D have been identified in most papers as problematic,
although NR has grown, with publications increasing rapidly in the last 15 years.
The benefits of structured support systems were seen, but nurses in lead R&D
posts often found problems in defining and carrying out their roles, often due to
cultural organisational problems where the value of NR was not appreciated. The
potential for closer joint working between trusts and HEIs was acknowledged. However, organisations where support had been introduced often found benefits such as a raised profile for nursing R&D, an increase in education levels and projects and greater use of available support systems.

Summary

Both policy and organisational papers on capacity and capability in NR are limited. Government action has now been taken to try and address these issues after many years of inaction. Organisations themselves have been responding to the changes in research management and governance, with more structured approaches to support and mapping exercises emerging. However, organisational culture can still be a barrier in relation to NR and the nurses employed to facilitate this.

Nursing research activity

This section will review papers on the experiences of clinical nurses undertaking NR in healthcare settings, those considering aspects of combining roles as a clinician and a researcher, and papers on career pathways for clinical nurse researchers.

Nursing research in healthcare settings

Many papers and books contain accounts of personal experiences of the actual mechanics of undertaking research, such as problems and difficulties of certain methods and problems of access for externally-based academic researchers (see for example Hockey 1985, Webb 1989, Meyer 1993). These are not reviewed as the focus here is NR by clinicians in healthcare settings. Some books were found
process, although one chapter (Pirie 1995) also gave accounts of role conflict that will be discussed later in this chapter. Very few papers were found describing the experiences of clinically-based nurses undertaking research in the NHS setting that included perceptions of organisational support strategies and barriers, and experiences of NHS R&D mechanisms. This was also found by Coghlan and Casey (2001). However, four primary research papers were located that had partially investigated the experiences of clinical nurses carrying out research in clinical settings, and in addition Coghlan and Casey (2001) wrote a discursive paper on action research by practitioners.

Clarke and Proctor (1999) investigated the ambiguous relationship of practice development (PD) with research and practice. Ten focus groups were held with research-interested healthcare professionals in one HEI, as part of a seminar series. Results relevant to this review were that tensions existed between being a practitioner and a researcher, and that PD and research were seen as being separate activities from professional practice. Much emotional and personal investment went into PD and research activity in terms of time and personal involvement. Tensions with colleagues were common, and changes to practice took a long time. The boundaries between research and PD were not clear and a lack of formal published evidence for practice was seen as holding back innovative development. The authors recommended that models of research in practice should incorporate more participatory and new paradigm research such as action research, case studies, and reflexive research.

A clear description of the process of collecting and analysing data was given, although it was not stated how many researchers were present at each focus
A clear description of the process of collecting and analysing data was given, although it was not stated how many researchers were present at each focus group and whether or not notes were taken in addition to tape-recordings to highlight aspects such as group dynamics that might affect findings but not be ascertained from a tape-recording. The account of the process of analysis, peer review of transcripts and member-checking by participants provided a clear decision trail of the research process. Quotations were included to highlight findings and the limitations of a self-selected sample were discussed. This paper highlighted the tensions that research activity can cause in practice and the emotional and personal investment that clinicians make in order to conduct research in practice settings. Although the groups were multi-professional, there were representatives from nursing practice, and the problems highlighted of researching in an NHS setting can be seen as applicable to nurses.

Clifford and Murray (2001) evaluated a project to facilitate NR development in practice in an acute hospital. There were three stages: a pre-test survey, followed by R&D development activities and a post-test survey. A pre-test questionnaire was distributed to all 473 qualified nursing and midwifery staff in the trust, with a 50% response rate. This examined research involvement and activity, attitudes to research and reading of research, and gathered personal and professional details. The post-test survey was distributed to 144 staff still in post who had responded to the initial questionnaire, with a 56% response rate. Pre-test involvement in NR activity included data collection (35%), research facilitation (35%) and providing information for researchers (26%). Overall responses reflected a positive attitude towards research. Open questions on barriers to undertaking research revealed four categories: lack of time, support, research facilities and research knowledge.
The interventions were educational, using open learning materials on research and tutorial workshops, plus the opportunity to undertake research: small research project grants were given to five teams, with 25 staff involved.

There were no statistically significant differences in findings post-test. However, qualitative data from the 25 staff involved in the research projects showed that barriers to research activity were key factors affecting project development, as trust changes and a lack of research culture had caused many issues with time and lack of replacement staff for those trying to do the research. Participants also felt that lack of knowledge about undertaking research was a problem when trying to develop projects.

The recommendations were that staff new to research should work alongside experienced researchers who would take the lead role. Limitations of the study were discussed and justified, for example the second-phase sampling procedure where only respondents to Phase 1 were sampled. The questionnaire was piloted and tested for internal reliability and face validity to ensure rigour. The key feature of the study for this review were the organisational issues, such as a lack of research culture and lack of organisational support, which were major problems for practitioners.

The third paper explored Finnish nurses' views on their research activities (Kuuppelomaki and Tuomi 2003). A survey design was used, and 600 structured questionnaires were sent out to nurses in two acute hospitals and 10 health centres, selected using purposive cluster sampling. The response rate was 400 (67%). The questionnaire was devised from the literature and incorporated parts of
a pre-validated tool on barriers to research utilisation. Results showed that 63% of respondents wanted more R&D training, and 66% had never attended national or international conferences. Fifty-eight percent read nursing journals and other literature, whilst 60% had carried out their own research. Those who had carried out research were generally younger and had completed post-registration studies and training in R&D. Much of the research was for academic courses and only 10% had carried out research purely for practice development. One third had changed practice due to research findings. Only 23% had published results, 48% had presented unpublished reports and 42% had given oral reports locally. Undertaking research was not seen as a job requirement, and was problematic due to a lack of time, skills and interest, with 28% stating that they did not benefit in any way from doing the research. Doctors were seen as unsupportive by 80% of respondents when applying research to practice, although 61% reported good managerial support at ward level. The report gave a clear presentation of the findings and discussed the reliability and validity of the questionnaire. Piloting was carried out. Limitations of the sampling strategy were acknowledged but the questionnaire had a good response rate. However, additional data collection via interviews might have gained more in-depth information on nurses' experiences and views: the information collected was broad but the nature of the design limited the amount of information on personal experiences that could be gathered (Bowling 1997).

Tanner and Hale (2002b) explored how a small group of research-active nurses perceived and overcame the reputed barriers to undertaking research in practice. A purposive sample of 11 research-active nurses was identified in one trust. Inclusion criteria were that researchers had to have carried out independent
research (not for an academic award apart from a PhD) that had been disseminated via publication or external conference presentation. Methods used were semi-structured interviews plus a pre-validated rating scale used by Hicks (1995b) and Hundley et al. (2000). Respondents were all sister or senior sister grades and none was in a role where research was part of the role. Only three had done a recognised research course but eight held first or higher degrees. Results found that the main motivation for the research was to improve patient care or solve a clinical problem. Barriers were perceived as extrinsic i.e. outside of their control - staffing, finances and managerial support. Intrinsic factors such as time, lack of knowledge, lack of motivation, lack of confidence were not perceived as barriers but excuses. Nurses used manipulation and/or covert behaviour to overcome extrinsic barriers. Support from managers was seen as influential and facilitation by others was the most important factor in the publication of results. Nurses used the results to change practice. Research activity was not seen as part of their routine work - much of the research was done in their own time as they felt ‘guilty’ (p371) about doing it at work.

Limitations of the study included a potential for omission as research for Master’s degrees and unpublished research was not included, but a rationale for this was provided. A census of staff may have picked up more researchers (researchers were identified via a walkabout visit to 79 wards, a database search of the R&D register and from senior nurse managers). Quantitative data were analysed descriptively using percentages only: no tests of statistical significance were employed. However, this is justifiable in view of the small purposive sample. Strengths included the use of a pre-validated rating scale and a clear decision trail and outlining of rigour for qualitative data. Conclusions were that strategies for
increasing research capacity may benefit from seeking out interested individuals rather than a blanket provision of research training and that facilitators are key in giving nurses confidence and impetus to undertake and publish research.

Coghlan and Casey (2001) discussed the challenges of undertaking action research by practitioners in their own hospitals with reference to the literature and concluded that practitioner research has its own challenges, with political dynamics affecting projects to the extent of preventing the research from being carried out due to hidden issues of which the researcher might be unaware but might uncover and challenge. They noted that the status of practitioners as permanent ‘insiders’ could place them in conflict with the hospital’s formal justification of what it wanted in the project and the researcher’s own personal justification for the work. This was also noted to some extent by ‘outsider’ action researchers: Meyer (1995b) and Webb (1990) both had support from managers but encountered difficulties at ward level with ward sisters who had differing agendas. Coghlan and Casey concluded that practitioner researchers need a pre-understanding of organisational politics and the ability to manage political processes, along with active engagement with individuals, teams and departments, if they are to succeed.

These five papers were all of use in highlighting some organisational issues that have an impact on nurses’ ability to carry out research in practice. They also highlighted issues in NR such as poor dissemination of findings via publication (with few Finnish nurses publishing papers even though a large number had carried out research) and the carrying out of NR primarily for academic awards, findings also reported by Hicks (1993, 1995b). The importance of facilitators to
help this process was highlighted. Finally, papers also drew attention to the amount of personal and emotional involvement required for practitioners to undertake research in clinical arenas. This finding overlaps with the cultural issues often reported by practitioners, which will now be discussed.

**Cultural issues**

A total of seven articles were found relevant to this aspect of the review. The majority concentrated on role conflict and the ‘insider-outsider’ debate (Beale and Wilkes 2001, Hicks 1996, Pirie 1995, Colbourne and Sque 2004). Literature was also found on practitioner research in terms of new initiatives to integrate research in practice and remove the divide between ‘knowledge generators’ and ‘knowledge users’ (McCormack 2003), and on cultural aspects of a lack of power and authority (Walker 1994, Redwood 2005). The majority of literature was discursive and only two research studies specifically exploring these aspects were identified (Beale and Wilkes 2001 and Hicks 1996).

Beale and Wilkes (2001) investigated how a sample of nurse researchers in Australia felt when doing clinical research, and how they acted when faced with situations where they considered moving from researcher role to a nurse role during data collection. They analysed interviews (n = 4) and written stories (n = 22) and found that participants’ reactions could either be classified as always a researcher (apart from life-threatening events) or sometimes a researcher, sometimes a nurse. This did not differ with research topic, methodology or context. Those who moved into a nurse role did so in three main situations: life-threatening or anxiety-producing situations, grey areas such as those of importance to staff or
clients and invisible areas such as being an integral part of the social environment. Issues with rigour include the very small sample of interviewees, making transferability of this data difficult to ascertain. The analytical processes were described and both researchers analysed results to reach a consensus for confirmability. Quotations were given to demonstrate themes. These processes made the decision trail transparent. The main recommendations were for better research education and management support for nurses conducting research, with opportunities for de-briefing, and for more debate about role delineation to aid researchers in sharing experiences and solutions.

Hicks (1996) explored whether research skills and activities were incompatible with the traditional role expectations and values of nursing by devising a questionnaire from Asch's seminal Central Trait Theory study (1946). Thirty-three qualified nurses attending post-registration short courses in a college of health studies were randomly selected from a convenience sample of 73. The results showed that if a nurse was described as a good researcher, the traits attributed to the nurse were assumed to be incompatible with those of a good clinician and vice versa. It was speculated that this could be linked to expectations of gender, as the characteristics of a good researcher may have 'masculine associations' (p361) and that this may help explain the shortfall in published NR and the low take-up of results in practice as the majority of nurses are female. The main limitations of the study were the small convenience sample (there was no evidence of power calculations (Bowling 1997) for the sample size needed to demonstrate statistically significant findings). Only female nurses were sampled, and therefore more research is needed on males for these traits. These limitations were acknowledged. The recommendations were that intervention is needed to
integrate these sets of conflicting constructs, and that a shift in attitude is needed towards the concept of research and those who conduct it.

Pirie (1995) discussed the problems related to being a researcher and a nurse in her research into communicating with children, which was carried out in the course of her normal work in a child and family psychiatric unit. Problems arose with planning and organisation, for example checking that rooms and resources were available to her, and the ownership of video recordings undertaken for the research, which the organisation regarded as part of their clinical records, which caused problems with erasure of tapes after the project was completed. She also had to remind herself constantly, when undertaking the research, not to go beyond the boundaries of the research and found this difficult when participants made comments that in the clinical setting she would have tried to explore and develop further. Finally, she had to consider ethical and legal issues, such as how to deal with allegations of abuse that might be made in research interviews, and what procedures should be followed if these occurred. She concluded that trying to comply with both clinical and research procedures was 'much more stressful than I had ever anticipated.' (p 98)

Another personal account of role conflict was provided by Colbourne and Sque (2004) who described the difficulties encountered when patients do not understand the researcher role and expect nursing care to be provided. Not being able to help patients resolve their problems led to Colbourne feeling 'callous, uncaring and awkward' (p299). She devised some strategies to overcome this, such as not wearing a uniform, not including patients whom she had previously nursed, reinforcing her research role and suggesting other practitioners for patients to
contact for advice. Despite this, there were still occasions when she moved into a nurse role rather than that of researcher. There have been many debates on the distance that researchers should adopt with regard to participants. Field and Morse (1985) and Holloway and Wheeler (2002), for example, advised that the role should be investigational and that other interventions introduce bias. Chesney (2001) argued that the issue is not how close or distant the researcher is, but their ability to recognise their impact as a practitioner on the research. Wilde (1992) indicated that putting aside nursing skills is impossible and unnatural, and that this can facilitate the research as long as the researcher is aware of their impact. Cartwright and Limandri (1997 p225) identified a multiple shifting of roles and relationships as research progresses, from ‘stranger-stranger’ to ‘friend-friend’, as well as to ‘nurse-client’. Colbourne and Sque concluded that using a reflexive approach, adopting the concept of a ‘professional friend’ and embracing the nurse role (p303) were useful tools in dealing with this conflict.

These four papers provided some information on the role conflicts and cultural issues that can occur when clinicians undertake research. These issues were found to be stressful by some, and recommendations to reduce stress included educational and management support, use of reflexivity and a shift in attitudes towards nurses as researchers.

McCormack (2003) discussed the need to create a research culture in practice, and stated that the most feasible way to achieve this is through more practitioner research in order to integrate knowledge generation with knowledge utilisation, whilst also addressing developments at individual, organisational and strategic levels. McCormack highlighted the traditional approach to research as being
carried out by academics, with researchers not being seen as engaged with practice in terms of daily realities and challenges. Research is therefore seen as unimportant to practice with no influence on how practice decisions are made. Defensive practitioners emerge who defend lack of use of evidence in practice in terms of realities such as lack of time, poor staffing levels and no support. A different model was proposed by McCormack to provide a culture of critical enquiry: that of a shared governance approach to management in which everyone is seen as a leader of something and all staff are committed to continuous quality improvement. Practitioners also need to learn to respect diversity of opinion and accept/give supportive criticism: this is referred to as 'emotional intelligence' (p92), and clinical leaders need to allow staff to take risks to achieve shared governance. One trust's progress towards achieving this was described, with the appointment of a Professor/Director of NR and PD. Consensus workshops were held, a questionnaire distributed based on the workshop themes, and 20% of nursing staff were sampled. From this, a strategy was developed as recommended by staff, who also identified priority topics for R&D, and new career pathways for practitioner-researchers were introduced.

Robinson (1999) also used a shared governance model to promote the production and use of evidence in practice, as reviewed earlier: both papers examined the potential benefits of a change in management style, with Robinson outlining structural changes and McCormack arguing for the creation of a research culture by giving an example of how one trust approached this. Both outlined positive achievements, although McCormack acknowledged that further evaluation was needed before firm conclusions could be drawn about its effectiveness. This
theme of changing the culture and power base was taken further by the remaining two papers.

Walker (1994) examined the relationship between nursing and research from a critical feminist/postmodern perspective, maintaining that nursing and research co-exist in a 'troubled' relationship in which tensions and conflicts work to constrain nurses' attempts to engage in research activity. It is argued that the history of nursing as a predominantly female profession ensured that nurses' production of knowledge in health care was almost invisible. This was believed to be due to the disqualification of nursing knowledge as trivial and naive by 'sovereign patriarchs' (p165), who have led nurses through a history of domination and subjection via a politics of gender. This has had the effect of nurses believing that 'doing' is more important than 'thinking'. Time and resources for research are difficult to obtain due to organisational culture. Traditional positivistic approaches, together with economic rationality of what constitutes 'good' research, have undermined the availability of funding opportunities when other research methods are proposed. Walker suggested that, in order to respond to the need for NR, nurses need to challenge these cultures and free themselves from 'oppression' (p167). This view is shared by others; Bradshaw (2001), for example, takes a similar stance, and perceives that NR threatens some parts of the medical profession. He states:

'The embrace of research by females of a generally less intelligent, lower social class has threatened the social order and there is substantial resistance to the idea that nurses should do research at all.' (p126)

Walker's article was written in 1994; it can be seen from some of the papers already reviewed (for example Robinson 1999, McCormack 2003) that some of
these challenges have since been taken forward in order to provide nurses with power-sharing opportunities, which have in turn led to more opportunities to become involved in clinically-based, nurse-led research. The use of a wide variety of research methods is now more established, and the government policy of service evaluation via the SDO scheme also provides an opportunity for alternative research designs. However, these changes are in the early stages and it remains to be seen whether organisational and professional cultures will maintain and build on these changes. There are still issues of power and authority in NHS research processes, as the final paper in this section by Redwood (2005) shows.

The aim of Redwood's (2005) recent paper was to bring to the surface issues of power and authority in the process of seeking ethics approval for NHS research. Redwood gave an account of seeking REC approval for a collaborative project with nurse consultants, using a case study approach, and how this was refused due to the collaborators being in control of selecting their research participants, rather than Redwood herself. The committee argued that this would introduce bias and render the research invalid and therefore worthless. Also, as public monies had financed the project, the results had to be useful and generalisable. Redwood commented on the now integral place of EBP in the NHS, and the associated 'hierarchy of evidence' which rates research based on positivistic methods at the top and places qualitative and interpretive approaches at the bottom of the scale (Sackett et al. 1996). This has led to funding, technical and publication bias in favour of positivistic approaches (Gupta 2003). Redwood argued that the research governance framework (DoH 2001a) confirmed the power and legitimacy of the traditional scientific method, and that RECs' concentration on scientific methodology disadvantages those using qualitative
approaches, where design is often emergent. RECs were seen as not always
having the depth and breadth of knowledge to assess the merit of these proposals.
She had to amend her proposal and include selection criteria in order to gain
approval, but was left wondering whether she herself had acted ethically in doing
this.

Some of these aspects appear to have now been partly recognised by
government, with the recent report of the advisory group on the operation of RECs
(DoH 2005a), emphasising that it should not be the role of RECs to assess
scientific quality, but to ensure ethical conduct of the study, and that scientific
quality should have already been established within RG arrangements before REC
approval is sought. Also, it has now been recommended that ethics approval is not
needed when working with NHS staff or undertaking survey and service evaluation
research. However, the problems with what constitutes 'scientific quality' remain:
this term is not defined, and the assumption is that there is a general consensus
on its meaning and application.

The papers by Walker and Redwood served to highlight issues of power and
control in nursing research and the historical influences of power, dominance and
gender that have shaped NHS research processes. They thus provided further
information on the background to, and conduct of, NR in clinical settings.

Career opportunities for clinical nurse researchers

Career prospects for clinical nurse researchers will now be considered. Three
papers were found that related to career pathways for clinical nurses interested in
research.
The Council of Deans and Heads of UK University Faculties of Nursing, Midwifery and Health Visiting (1999) released a consultation paper on the development of clinical academic careers. They highlighted the lack of a clinical academic career in nursing and the difficult choices nurses historically have had to make when developing academic and research careers, which usually involved giving up their clinical career. Closer connections between trusts and HEIs via a forum to drive forward best practice, the appointment of clinical deans, and more joint appointments, with the opportunity to weave a career between the clinical and the academic to allow for freer movement, were recommended. They suggested auditing practices to identify good working models. This was a short general consultation paper, with little specific detail on clinical research careers and no follow-up information is given on their website as to the results of the consultation exercise. However, the information was used by the Strategic Learning and Research Advisory Group (StLaR) to inform their report (Butterworth et al. 2005).

Kenkre and Foxcroft (2001) examined career pathways in research for clinical practice as part of a wider project on career pathways for nurses. They outlined the benefits and drawbacks of a clinical career encompassing research activity and saw this as linked closely with that of the nurse consultant (NC) role, with nurses progressing clinically from a Registered Nurse with critical appraisal skills via a nurse practitioner or clinical nurse specialist role, in which high quality evidence is incorporated into practice, through to the NC who has research experience in practice-based research methods and is able to undertake and lead research. The article concentrated on the development of the nurse consultant role, seen as key to NR activity by the authors. This role was set up by the UK
government from the late 1990s onwards (DoH 1999a) to advance practice, research, leadership and education in nursing and respond to changing NHS needs, following Manley’s conceptual framework (1997). The first wave of NCs was appointed in 2000, and a total of 1000 appointments by the year 2004 was envisaged in the NHS Plan (DoH 2000c).

Nurse consultants have four essential domains to their role. Health Service Circular 1999/217 (DoH 1999b) states that 50% of the role should be practice-based. It should have four main functions: expert practice, practice and service development; research and evaluation; professional leadership/consultancy; and education, training and development. One reason for the setting up of the role was the need to provide a clinical career structure with financial rewards sufficient to encourage recruitment and retention. The need to encourage clinically-experienced and expert nurses to stay in clinical roles and perform leadership and staff development roles rather than going into a managerial role to gain higher rewards and job satisfaction was paramount (Woodward et al. 2005a). Kenkre and Foxcroft concluded that the NC role would offer clinicians the chance to progress their clinical careers with academic recognition, and allow them to engage in research projects and develop an active research component in their role. They saw the drawbacks as a lack of research on which to base practice, dealing with colleagues who do not value research, a potential lack of research skills, keeping up to date with central policy initiatives and the need to avoid work overload. (Further data on the development of the NC role collected in the course of this PhD study have been published in two papers (Woodward et al. 2005a, Woodward et al. 2005b in press) which provide new insight into how well NCs have been able to achieve their roles and undertake research, and the factors...
influencing this. These are enclosed at the end of the thesis.) Kenkre and Foxcroft did not discuss other possibilities in developing NR careers, such as researcher-practitioners who have joint contracts with the NHS and an HEI to develop research in practice.

Butterworth et al. (2005) reported on the work of the Strategic Learning and Research Advisory Group (StLaR), commissioned by the DoH to examine a growing crisis in the educator and researcher workforce in health, social care and education. In this paper they outlined the stages of the project and examined the issues facing educators and researchers in healthcare, suggesting some models for career development. The project involved a three-month consultation exercise with key stakeholders, followed by strategic meetings to agree a vision for a plan, identify barriers and propose recommendations. The final phase involved e-consultation via their website. Fifteen recommendations were made for a Human Resources (HR) plan (see Table 5.12). Three models for career pathways were outlined: for younger academics, for consultant practitioners, and a route for nurses into other training roles. All three include a clinical career pathway and an academic career, and allow for flexible movement between clinical and academic environments. The authors concluded that there should be a supported human resources plan and costed implementation plans for teachers and researchers if their proposals are to become a reality, but commented that there was:

‘a gathering momentum for change to the status quo from influential groups and committees’ (p93).
<table>
<thead>
<tr>
<th>StLaR HR Plan Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Immediate implementation of HR plan for educators and researchers to recruit, retain and retrain an excellent workforce in health and social care.</td>
</tr>
<tr>
<td>2 Centres of excellence in education and research are being established in higher and further education. Work streams should be identified and centres encouraged through periodic contract performance to address the particular needs of educators and researchers.</td>
</tr>
<tr>
<td>3 A series of 'off-the-shelf' employment modes, embracing full-time, part-time and joint appointments should be made available to facilitate a range of different employment patterns. Career pathways should be provided for lecturer-practitioners, academics with a defined teaching pathway, academics with a defined research pathway and combined teaching/research pathway.</td>
</tr>
<tr>
<td>4 The key proposals of the Follett report aimed at clinical academics in medicine should apply to other relevant professionals in education and research in health and social care, with individuals having a single employer and being jointly appraised by senior colleagues in education and service. Job planning should be joint between both parties.</td>
</tr>
<tr>
<td>5 Consultant and advanced practitioners must be allowed to fulfil their obligations towards education and research. Pay modernisation processes should ensure these obligations are fully described in contracts of employment and employers must support teaching and research activities by senior staff.</td>
</tr>
<tr>
<td>6 Transparent guidance for employment rights and pension arrangements that transfer across the different sectors should be produced as a matter of urgency. Reviews of pensions in the public sector should be aware of the need for career flexibility.</td>
</tr>
<tr>
<td>7 All students following professional courses should be taught the basic skills of teaching and research awareness for service user benefit. Educational commissioners and quality assurance agencies should ensure this is done. These skills can then be enhanced in those who wish to become teachers and researchers.</td>
</tr>
<tr>
<td>8 A specific initiative should be established to enhance the National Training Number (Academic) scheme in medicine and dentistry. Government should extend this to other health and social care professions. A national budget stream should be sustained and developed further.</td>
</tr>
<tr>
<td>9 Employers in health care have a duty to support the education and research enterprise that will deliver EBP and a next generation of employees. This support should demonstrable through board-level accountability. Responsibility can be evidenced and enhanced by the Healthcare Commission and Commission for Social Care Inspection.</td>
</tr>
<tr>
<td>10 Managers should be assisted to work with employees in order to consider potential career options as educators and researchers into their annual review cycle and to facilitate suitable expert support and information gathering for those who may benefit from such a career move.</td>
</tr>
<tr>
<td>11 A labour market intelligence system designed to provide continuous accurate data on the employment and disposition of the research and education workforce should be developed. It should be driven by contractual arrangements between the Higher Education Statistics Agency, the further education sector and the DoH.</td>
</tr>
<tr>
<td>12 Note should be taken of the conditions of service that apply, including salary, superannuation, annual and study leave and working circumstances generally of those countries and jurisdictions that are most likely to prove alternative destinations for clinical academics and calibrate the structures and systems in this country accordingly.</td>
</tr>
<tr>
<td>13 Strategic health authorities, educational institutions and trusts, in tandem with social care agencies, should conduct a five-year prospective planning survey to determine the workforce demand for educators and researchers.</td>
</tr>
<tr>
<td>14 Investments through the Multi-professional Education and Training levy and Skills for Business networks should be made so that the workforce is appropriately qualified and supported to obtain the necessary knowledge and skills to be world-class educators and researchers.</td>
</tr>
<tr>
<td>15 A recruitment and awareness campaign aimed at drawing practitioners into education and research should be developed and launched, jointly driven by the DoH, social care agencies and the Department for Education and Skills. It should be directed at those entering the professions but also those with experience beyond registration. The known barriers to recruitment and retention should be addressed nationally and locally.</td>
</tr>
</tbody>
</table>

Key to abbreviations: StLaR = Strategic Learning and Research Advisory Group, HR = human resources, EBP = evidence-based practice, DoH = Department of Health

**Table 5.12 Recommendations of the Strategic Learning and Research Advisory Group Human Resources Plan** (Butterworth et al. 2005 pp 94-96)

The HR Plan Project is now with the Department of Health and Department for Education and Skills, who plan to take the proposals forward through a newly-formed Project Delivery Board (StLaR website 2005). The HR Plan Project Team is currently engaged on a number of work streams to take the StLaR HR Plan forward, including:
• mapping current funding streams and activities which support the HR Plan
• the development of guidance notes for employers on employment practices and pensions
• working with the Healthcare Commission and Commission for Social Care Inspection
• establishing links with the UK Clinical Research Collaboration (UKCRC) and Academic Careers sub-committee of Modernising Medical Careers (StLaR website 2005).

These proposals offer further hope for the formal development of clinical research careers. However, as Watson (2005) noted, many working in clinical practice and HEIs will wonder how realistic they are: the report does not comment on funding, and there has been no guarantee of central government funding of the recommendations. Nursing education in HEIs is largely funded by the NHS rather than the higher education funding councils (HEFCs), and Draper (2004) commented on a draft document by the Standing Committee of the Workforce Development Confederations (WDCs) that made clear statements about the exclusion of Master's level programmes with great weight given to research and a dissertation, which contradicts the ethos of higher education, and runs counter to the direction of modern health care (p659). Similarly, WDCs have not historically funded doctoral research.

Watson (2005) suggested that those who implement the StLaR proposals will therefore have an uphill struggle, as NHS funding bodies clearly do not value research, and he described their attitudes as 'hostile' (p661). This is evident in many nursing departments within HEIs, where the emphasis is on teaching at the
expense of research, largely due to the funding arrangements, as there is no
research support funding from the NHS, unlike HEFC monies which include
support for research in other university disciplines. These funding arrangements
have also contributed to all-year-round teaching, which leaves little time for
research. Nursing is therefore consistently at the bottom of the list in the RAE, a
situation described by Watson (2005) as 'dire' (p661). If the StLaR
recommendations are to be implemented, academic NR needs to advance and
attract sufficient funding if it is to collaborate with and support a huge increase in
clinical NR and clinical researchers.

These three papers have considered career prospects for nurse researchers from
a variety of angles. However, a general picture has emerged of a need for closer
links between the NHS and HEIs, with the need for a structured career framework
to encourage and support clinicians who are interested in developing research in
practice. The difficulties of doing this have been acknowledged, but the fact that
there is work ongoing at government level on clinical research careers may prove
to be a turning point in enabling NR in the practice setting to progress further.

Summary
There were few detailed in-depth accounts of the experience of undertaking
research in the NHS focusing on nurses' experiences of organisational support
and NHS processes. Some organisations were attempting to address these issues
by the use of organisational management models such as shared governance to
encourage nurses to identify research priorities and develop research activity.
Finally, recent literature on research career pathways was explored.
Nursing knowledge generation

The final part of this review considers nursing knowledge generation (NKG). Information about this topic was found in discursive papers but did not always form the main subject matter of the paper. However, 17 papers are reviewed in which the discussion either formed a major part or, if not the major part, was highly relevant to the topic.

Papers were from a variety of countries: the United Kingdom (UK), United States of America (USA), Canada, Australia and Sweden. The USA contributed much of the early debate, which has since developed in the UK and other countries; this reflects the greater development of NR at an earlier stage in the USA (Tierney 1998). When reading the literature, it became apparent that the concept of NKG had several aspects. In order to identify these further, the literature was examined using latent content analysis (Hammersley and Atkinson 1983, Babbie 1998). This enabled the development of a thematic framework (see Table 5.14) and assisted in identifying commonalities and differences of opinion.
<table>
<thead>
<tr>
<th>Theme</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nature of knowledge and knowledge generation</td>
<td>a) Pure research&lt;br&gt;b) Applied research&lt;br&gt;c) Integrated pure and applied research&lt;br&gt;d) Practice-led research&lt;br&gt;e) Types of knowledge&lt;br&gt;f) Research paradigms&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>g) Lack of knowledge base in nursing</td>
</tr>
<tr>
<td>2. Nature of nursing</td>
<td>a) Holistic&lt;br&gt;b) Individualistic &amp; eclectic&lt;br&gt;c) Caring and health activities&lt;br&gt;d) Health promotion&lt;br&gt;e) Art versus science&lt;br&gt;f) Families and cultures&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>g) Relationship of nursing theories and models to research and practice&lt;br&gt;h) What is nursing – can it be defined?</td>
</tr>
<tr>
<td>3. Knowledge generation for and in practice</td>
<td>a) Pluralism and pragmatism – methods led by research question and practicalities – versus methods set by individual researchers’ or politically driven paradigms&lt;br&gt;b) New paradigm research versus generalisable positivist research&lt;br&gt;c) Practitioner research - ‘bottom-up’ versus ‘top-down’&lt;br&gt;d) Capacity, capability and leadership in the practice setting&lt;br&gt;e) Quality of research activity&lt;br&gt;f) Barriers and resources&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>g) Relationship of research to practice development activity&lt;br&gt;h) Goal of knowledge generation – for practice, for development of theories and models or for aggrandisement of the profession?&lt;br&gt;i) Theory-practice gap&lt;br&gt;j) Traditions and attitudes of nurses&lt;br&gt;k) User involvement in research agenda&lt;br&gt;</td>
</tr>
<tr>
<td></td>
<td>l) Growth of nursing research activity and maturity</td>
</tr>
<tr>
<td>4. Political influences on knowledge generation</td>
<td>a) Government influences – modernisation agenda, R&amp;D agenda, multi-disciplinary research agenda&lt;br&gt;b) Organisational influences – monitoring, EBP, hierarchies of evidence&lt;br&gt;c) Tradition, gender and power issues and their impact on activity, funding and how NR is perceived&lt;br&gt;d) Large-scale programmes favoured, small scale projects not encouraged&lt;br&gt;e) Historical national lack of capacity and capability</td>
</tr>
</tbody>
</table>

Key to abbreviations: R&D = research and development, EBP = evidence-based practice, NR = nursing research

Table 5.14 Thematic framework for literature on nursing knowledge generation

As seen in Table 5.14, four major themes were identified: the nature of knowledge and knowledge generation, the nature of nursing, knowledge generation in practice, and political influences on knowledge generation. Table 5.15 shows the papers by author, date, country and title and identifies which themes were discussed in each paper.
This section of the review is therefore structured by theme rather than by author: themes will be discussed individually and then synthesised to summarise the findings.

<table>
<thead>
<tr>
<th>Authors / Date</th>
<th>Country</th>
<th>Title of paper</th>
<th>Themes discussed (see Table 5.15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stevenson, J.S. 1988</td>
<td>USA</td>
<td>Nursing knowledge development: Into era II</td>
<td>fg 2af 3abl 4ace</td>
</tr>
<tr>
<td>Randell, B.P. 1992</td>
<td>USA</td>
<td>Nursing theory: The 21st century</td>
<td>1abeg 2a 3ae 4a</td>
</tr>
<tr>
<td>Newman, M.A. 1994</td>
<td>USA</td>
<td>Theory for nursing practice</td>
<td>1cdef 2ac 3abh</td>
</tr>
<tr>
<td>Liaschenko, J. and Fisher, A. 1999</td>
<td>USA</td>
<td>Theorizing the knowledge that nurses use in the conduct of their work</td>
<td>1e 2eg 3bi 4c</td>
</tr>
<tr>
<td>Whelton, B.J.B. 2002</td>
<td>USA</td>
<td>Human nature as a source of practical truth: Aristotelian-Thomistic realism and the practical science of nursing</td>
<td>1de 2ade 3dh</td>
</tr>
<tr>
<td>Jaceno, B.J. and Jaceno, J.J. 1995</td>
<td>Canada</td>
<td>A holistic exploration of barriers to theory utilization</td>
<td>2g 3j</td>
</tr>
<tr>
<td>Mulhall, A. 1995</td>
<td>UK</td>
<td>Nursing research: what difference does it make?</td>
<td>1abg 3bcfhk 4ac</td>
</tr>
<tr>
<td>Maggs, C. 1997</td>
<td>UK</td>
<td>Research and the nursing agenda: Confronting what we believe nursing to be</td>
<td>2efh 3abcdk 4b</td>
</tr>
<tr>
<td>Tierney, A. 1998</td>
<td>UK</td>
<td>The leading edge in nursing research</td>
<td>1acg 3hkl 4ab</td>
</tr>
<tr>
<td>Rolfe, G. 1998</td>
<td>UK</td>
<td>The theory-practice gap in nursing: from research-based practice to practitioner-based research</td>
<td>1ad 2be 3bcghj 4abc</td>
</tr>
<tr>
<td>Rafferty, A.-M. and Traynor, M. 1999</td>
<td>UK</td>
<td>The research-practice gap in nursing: Lessons from the research policy debate</td>
<td>1abc 3cdfl 4abc</td>
</tr>
<tr>
<td>Thompson, D.R. 2000</td>
<td>UK</td>
<td>An exploration of knowledge development in nursing - a personal perspective</td>
<td>1ef 2g 3abhl 4acd</td>
</tr>
<tr>
<td>Clarke, C.L. and Wilcockson, J. 2001</td>
<td>UK</td>
<td>Professional and organizational learning: analysing the relationship with the development of practice</td>
<td>1de 2a 3cg 4b</td>
</tr>
<tr>
<td>Rafferty, A.-M. and Newell, R. and Traynor, M. 2002</td>
<td>UK</td>
<td>Nursing and midwifery research in England: Working towards establishing a dedicated fund</td>
<td>1g 3c 4ce</td>
</tr>
<tr>
<td>Tierney, A. 2003</td>
<td>UK</td>
<td>Introduction from the new Editor-In-Chief</td>
<td>1g 3eh</td>
</tr>
<tr>
<td>Pearson, A. 2003</td>
<td>Australia</td>
<td>Guest Editorial: Liberating our conceptualization of ‘evidence’</td>
<td>2b 3afl 4b</td>
</tr>
<tr>
<td>Lehtinen, U., Ohlen, J. and Asplund, K. 2005</td>
<td>Sweden</td>
<td>Some remarks on the relevance of basic research in nursing inquiry</td>
<td>1abc 2e 3ah 4a</td>
</tr>
</tbody>
</table>

Key to abbreviations: USA = United States of America, UK = United Kingdom

Table 5.15 Papers reviewed on nursing knowledge generation and themes identified

The nature of knowledge and knowledge generation

All papers except two (Maggs 1997 and Pearson 2003) considered the nature of knowledge and knowledge generation. Research was categorised into three main types: pure (also known as theoretical or basic) research, for example the development of theories and models of nursing; applied (or clinical) research, for

Authors were divided about how these types of research should relate to nursing. Thompson (2000) called for a broad approach to knowledge generation, using a mix of these research types in order to value and explore the diversity in nursing. Randell (1992) reported on a panel discussion between six renowned US nurse theorists and researchers (Johnson, Neuman, Orem, Parse, Rogers and Roy), who held a variety of opinions as to the value of pure research. Some thought it to be untenable in isolation (Orem, Parse, Johnson), whereas others considered that pure research was needed to define nursing and provide a theoretical knowledge base (Rogers, Roy, Neuman). Lehtinen et al. (2005) also argued that pure research leads to other valuable ideas and novel research questions; therefore the idea that nursing should abandon this, just because it is a practice-based discipline, should be refuted. They note that it could be stated that applied NR has no basis unless the theoretical underpinnings are in place. Newman (1994) charted the progress of NR in the USA, which initially relied heavily on the development of conceptual models and theories, but she recounted her personal shift away from pure research towards knowledge that empowers nurses in practice. Rolfe (1998) argued that failure by researchers to distinguish between clinical research and theoretical research has been a major cause of the 'theory-
practice gap' in nursing, whilst Mulhall (1995) commented on the perceptions of nurses that academic nurse researchers are divorced from the real world of care as their research is not seen as relevant to everyday patient care. However, Rafferty et al. (1999) reject the notion of a theory-practice gap, seeing it instead as:

'a metaphor for the tribal prejudice and institutional separations that set practitioner and researchers apart.' (p461)

Whelton (2002) argued that a stable, organised body of knowledge about the prevention of illness and restoration of health is fundamental to the practical science of nursing, and that this needs to be accessible to clinicians and transferable to individual circumstances.

Practice-led research was examined in detail by Rolfe (1998), who stated that the only way to overcome the theory-practice gap is by practitioner-based research and that 'using research means doing research' (p679). Newman (1994) talked of empowering nurses to be 'participant-observers in the phenomenon of nursing' (p156). Clarke and Wilcockson (2001) undertook an action research project with three case study sites and produced a model for developing healthcare practice, which included using and creating knowledge, with practitioners. A closer integration of education, practice and knowledge generation by practitioners was recommended if practice is to be developed; practitioners were recognised as having the potential to create knowledge and reconceptualise patient care.

Papers also discussed types of knowledge and research approaches or paradigms commonly used in knowledge generation. For example Thompson (2000) referred to practical, experiential, aesthetic, empirical and scientific knowledge, as well as outlining three research approaches - positivist, interpretive and critical or
emancipatory - and was of the opinion that all have their place in NKG, as were most of the panel in Randell's report (1992), and also Tierney (2003) and Stevenson (1988). Many of these writers felt that past debates over research paradigms, schisms between quantitative, positivistic researchers and those aligned to an interpretive paradigm were futile and damaging for the progress of NKG. Others (Newman 1994, Rolfe 1998, Maggs 1997) argued that positivistic or reductionist approaches were not in nursing's best interests in view of the practice-base of the profession, which they saw as lending itself more to practice-based interpretive or critical approaches.

Liaschenko and Fisher (1999) proposed an alternative classification of knowledge that they called case, patient and person, to reflect the content of the knowledge necessary for the conduct of nursing. Case knowledge is general knowledge of disease processes, pathophysiology, pharmacology, and other therapeutic areas. Patient knowledge defines the individual within the organisational system, and is the knowledge of an individual's response to interventions and knowledge that enables nurses to help the patient through healthcare systems and through illness. Person knowledge is knowledge of the individual with a personal history and social systems who is autonomous and capable of reasoned actions. Liaschenko and Fisher hoped that an alternative classification would to assist practitioners to theorise about the interaction between NKG and practice, but presented no information on its effectiveness.

The last category to emerge in this theme was that of the perceived lack of a comprehensive knowledge-base in nursing. This was commented on by writers in the USA and Canada over ten years ago (Stevenson 1988, Randell 1992, Jacono
and Jacono 1995), but was also more recently identified by UK researchers (Thompson 2000, Rafferty et al. 2002, Tierney, 2003). The knowledge base was still perceived as in its infancy and with a potential for harm because of this (Rafferty et al. 2002). This was seen as linked to factors such as the nature of nursing, and political influences, two of the other themes which emerged from the literature and which will be explored further in this chapter.

The nature of nursing

Twelve papers considered NKG in relation to the nature of nursing (see Tables 5.15 and 5.16). The overall perceptions of the majority of authors who considered this were that nurses work holistically with individuals, families, societies and cultures, both for the care of illness and for the promotion of health (for example Stevenson 1988, Randell 1992, Newman 1994, Clarke and Wilcockson 2001 and Pearson 2003). These aspects were seen to have an impact on NKG which, as discussed above, led to a variety of opinion as to how this knowledge should be generated; they also contributed to the lack of a substantial knowledge-base in view of the complexity of the nature of nursing.

Some authors debated whether we actually know what nursing really is, or will ever know, and this was also linked to the 'art versus science' debate (Jacono and Jacono 1995, Whelton 2002, Maggs 1997, Lehtinen et al. 2005); all saw nursing as both an art and a science. Maggs (1997) went further, stating that unless we can define what nursing is, we cannot expect to be able to define a NR agenda or expect other professions to take nursing seriously as a profession with its own body of knowledge and its own research approaches.
Three authors considered the nature of nursing with reference to the relationship of theoretical knowledge to practice. Jacono and Jacono (1995) discussed the reluctance of clinical nurses to adopt theoretical knowledge to guide practice, stating that theory utilization is still seen as an 'ivory tower' activity (p515). However, they suggested that theory development is linked to the need for nursing self-definition and 'ego-gratification' (p516), in order to relieve hidden insecurities about what nursing is, rather than to improving practice. Thus, clinicians are not solely responsible for the reluctance to use theoretical knowledge in practice.

Thompson (2000) also stated that many theories and methodologies (both grand theories and empiricism) used in nursing are vague and unhelpful, as many are 'abstract, difficult to test and often useless' (p393). In order to address this, Liaschenko and Fisher (1999) identified a model of three types of knowledge influencing practice (see above), in order to develop a classification of knowledge that would be useful to clinicians. This was developed by undertaking ethnographic and narrative studies of the types of knowledge used by clinicians in their work environments, although an evaluation was not given of its usefulness.

This leads on to the third theme identified from the literature on NKG, that of knowledge generation in practice.

Knowledge generation for and in practice

All 17 papers considered knowledge generation in practice, and many issues emerged. It was universally acknowledged that nursing needs knowledge to be generated for and in practice. Perceived ways of doing this were mixed. Some called for pragmatism and pluralism, with research methods being chosen on the grounds that they fitted the research question (Tierney 1998, Thomson 2000, Stevenson 1988, Pearson 2003), whilst others called for methods specific to
nursing to be identified and developed (Newman 1994, Maggs 1997). Those
calling for pluralism were more concerned with showing that research is of a high
quality and rigorously undertaken (Tierney 1998, Thompson 2000). New paradigm
research, for example action research, conducted with or by practitioners, was
espoused by Rolfe (1998), whilst Mulhall (1995) acknowledged that the general
research model is 'top-down' rather than 'bottom-up', which means that research
often remains a 'mysterious academic pursuit' and of little relevance to everyday
care (p577). Despite the universal acknowledgment that NKG should lead to
knowledge for and in practice, alternative goals were identified in the literature and
it was questioned whether NKG was for the development of practice, for the
development of a theoretical base, for aggrandisement of the profession in its
quest for professionalism, or all of these (Newman 1992, Mulhall 1995, Tierney
1998). However, writers also considered that NKG has matured and developed
rapidly over the last few years (Randell 1992, Liaschenko and Fisher 1999,

Capacity, capability, resourcing and leadership issues were examined in some
papers. Rafferty and Traynor (1999) suggested that researcher and practitioner
roles should be intermingled and should overlap to improve both capacity and
capability, whilst Maggs (1997) pointed to the need for expert leadership in
practice to inspire others to excellence. The need for capacity building and
investment was seen as key (Rafferty et al. 2002), with a need for dedicated
funding for NR to enable this, and Thompson (2000) and Tierney (1998) both
referred to the establishment of the National Center for Nursing Research in the
USA in 1986, later redesignated the National Institute of Nursing Research
(NINR), which serves as a focus for federal support of NR and research training.
This was seen as the ‘coming of age’ of NR in the USA (Tierney 1998 p305) and the top 10 research-ranked schools of nursing in American HEIs have secured more than $672 million in research income from the national institutes of health (McCormack 2004b).

Barriers to practitioner research were also mentioned: Mulhall (1995) commented on lack of research experience, poor career prospects and exploitation of nurses by other professions, where their skills are used in data collection and this is expected but unacknowledged and unfunded. The negative attitude of some nurses towards research were mentioned by Jacono and Jacono (1995), Mulhall (1995) Tierney (1998) and Rolfe (1998), and this was seen as related to research being perceived as elitist and out of touch with the realities of practice.

The relationship of NKG to practice development activity was explored by Clarke and Wilcockson (2001). Knowledge generation was seen as an integral part of developing practice, but not all practitioners in their study could see the possibilities or potential for developing practice and generating knowledge in their own areas. Those practitioners who were most able to see possibilities were described as expert thinkers who could see past traditional barriers of time and resources. The authors concluded that practice development relies on the inter-relationship of practice, learning and NKG, and is rather like a car’s gear box:

‘... if all the cogs do not move simultaneously the whole will seize’ (p271).

The final area to be mentioned in this theme was that of user participation in NKG. Mulhall (1995) identified a need for the public to be involved in decisions about what their needs are, so that NKG can be adapted to meet these needs. This view
was shared by Maggs (1997), who called for patient and carer representation on research project advisory groups to participate actively in setting objectives and deciding on implementation strategies, whilst Tierney (1998) commented that the public is largely uninformed about NR. More user involvement is one of the central aims of government modernisation policy (DoH1997a), and this could therefore also be seen as a politically-driven agenda. This links with the theme of political influences on NKG, which will now be further discussed.

**Political influences on knowledge generation**

The final theme to be identified from the literature was that of political influences on NKG, with 13 papers discussing this. Government influences were debated by many, with Thompson (2000) and Tierney (1998) calling for a UK system for NR similar to the USA's NINR, which was seen as key in progressing capacity, capability and knowledge generation there. As discussed earlier in this chapter, more recent UK government changes supporting the growth of capacity and capability for nurses and AHPs (HEFCE 2001) now mean that there is an opportunity for NR to progress more quickly (Rafferty and Traynor 2004a).

Rafferty (1998) stated that research has its own political economy, driven by managerialisation, the alignment of R&D with national economic and policy priorities, multidisciplinarity, the ascendancy of accountancy in the NHS and performance measures (p313) which have acted as concerns and constraints for all researchers in the NHS. The UK NHS modernisation agenda was seen as contributing to a more structured R&D policy (Rafferty and Traynor 1999), with a mixed effect on knowledge generation. It was an improvement on what was previously a 'ramshackle edifice of research advice' (p458) but had the potential
disadvantage of stifling clinical autonomy and creativity. One example is the NHS R&D programme, which has led to an increase in large-scale research projects and a reduction in funding for small-scale individual projects. However, this was seen by some (for example, Thompson 2000) as beneficial in removing unreplicated and ungeneralisable studies and reducing a lack of focus. Researchers are instead encouraged to focus on distinctive, coherent programmes of research.

The multidisciplinary research agenda was also discussed. This was seen as both potentially beneficial and damaging. Stevenson (1988) commented that many research questions would benefit from multidisciplinary collaboration, but also recognised 'a host of reasons to avoid interdisciplinary efforts' (p159), including being made to feel inferior, being told NR is trivial or unscientific, and fear of being rejected. However, she acknowledged that gaining respect from other disciplines would be worth the effort as it would contribute to the evolution of nursing knowledge. Randell's panel discussion (1992) also debated the issue, with mixed feelings emerging: some saw multidisciplinary research as impossible until NR has its own unique body of knowledge firmly established (for example, Parse), whilst others felt it possible to collaborate in situations where a wide variety of information is needed (for example, Johnson, Roy). Mulhall (1995) noted that multidisciplinary research should, in theory, facilitate an eclectic approach to healthcare research but, in order for this to happen, a more open, flexible manner was needed by all disciplines to appreciate and accept epistemological differences, and to discard professional territories and jealousies. Tierney (1998) saw multidisciplinary research as breaking down traditional disciplinary boundaries, and improving the capacity to tackle urgent or complex problems.
Thompson (2000) also recognised that nurses should be participating in multidisciplinary research, but he also saw the need for nursing to develop further its own knowledge-base, stating that it could be difficult for nursing to preserve its identity in the multidisciplinary arena.

Concerns over other influences such as tradition, gender, power and organisational issues arose. These were also noted as having an impact on aspects of NKG such as funding and implementation of findings. Rolfe (1998) commented on the traditional, hierarchical model of research being carried out by an elite group composed mainly of academics and then passed down to practitioners for implementation in the belief that in this way it would be introduced in a fairly straightforward way, a process known as 'technical rationality' (Schön 1983). He regarded this as inappropriate for practice and responsible for the 'theory-practice gap'.

Mulhall (1995) considered issues such as gender and power and felt NR was constrained by the low professional status of nursing, with nursing recognised as 'low paid women's work' (p579), confusion about the nature of nursing and problems unique to the profession, and lack of an identifiable body of knowledge. This was seen as causing problems in obtaining research funds, a small investment in NR generally and lack of understanding by more powerful disciplines (especially the medical profession) of the nature of NR, which has resulted in prejudice and 'medical hegemony' (p579) and has led to nurses having particular difficulties when applying for funding to organisations such as the Medical Research Council (MRC).
Maggs (1997) discussed the effects of organisational policies on EBP and clinical effectiveness (CE), with the associated ‘hierarchy of evidence’. This was seen as inappropriate for nursing, which relies on ‘patient experiences, personal, cultural and family contexts’ (p321) to guide research, rather than the primarily experimental interventions that are at the top of the EBP hierarchy. Maggs (1997) concluded nursing needed to develop its philosophy and research agenda to ensure it did not: ‘fall foul of the reductionist trap’ (p322). Clarke and Wilcockson (2001) discussed the role of organisations in enabling development of knowledge and practice to take place and saw the nature of the organisation’s ‘behavioural world’ as key (p270). A two-way process was needed, with open and co-operative atmospheres beneficial to both practitioners and organisations in promoting a climate of inquiry by allowing practitioners to change systems and allowing organisations to provide reinforcement and support.

Summary of the literature on nursing knowledge generation

Overall, it can be seen that the topic of nursing knowledge generation is complex and has a variety of aspects that all influence practice. Opinions were divided as to the best way in which to increase the knowledge base, which was seen as low. However, all agreed on the importance of NKG for and in practice, and all felt that NKG had improved markedly in a relatively short time-scale.

Conclusions from the literature review

This chapter has considered organisational support for nursing research, nursing research activity and nursing knowledge generation.
The review of organisational support considered relevant government policy and its impact on NR. It was seen that NR historically has been under-resourced, leading to lack of capacity and capability. Action is now being taken by the government with the provision of dedicated funding streams for both nursing and AHPs to increase research training and activity. Modernisation of the NHS has also had an impact on NR, with changes to R&D funding and research governance in the NHS giving a more structured approach to R&D management. This has affected research planning, implementation and reporting. Organisational support was also reviewed: as NHS changes have affected organisations, papers have been produced by trusts on how they have structured R&D support and accounts have been published of mapping exercises of NR activity.

The review of nursing research activity found that there are few in-depth reports that focus on nurse researchers' experiences of organisational support and NHS processes. Those found highlighted the amount of personal and emotional involvement needed by clinicians undertaking research. Role conflict was common, and most NR by practitioners was undertaken for academic awards. Dissemination via publication was poor. Issues of power and tradition emerged, but some NR activity had been enhanced by the introduction of new management models such as shared governance or support such as facilitation. Career pathways were also examined. These have historically been limited, but nationally work is currently ongoing to introduce improved clinical researcher career opportunities.

The literature on nursing knowledge generation revealed four major themes: the nature of knowledge generation, the nature of nursing, knowledge generation for
and in practice, and political influences on NKG. There were many differing opinions on the nature of knowledge needed for nursing and means of generating this. However there was general agreement that the nursing knowledge-base is low and needs further development, that knowledge generation is needed for and in practice, and that NKG has advanced and developed well in recent years.

The literature reviewed here has been gathered over the lifetime of the PhD project and many changes in policy and the local processes of R&D management have occurred during this period; these have informed the research whilst it has been in progress. The review has considered information in line with the aims of the study and has highlighted existing knowledge about these areas. Issues from this review will also be discussed in Chapter 8, when the results from the Phase 2 of the study will be related back to the literature, and recommendations for policy and practice made. The literature available at the time of the design of Phase 2 of the study helped to clarify issues and contributed to the decisions made on research design and methods. The methodology for Phase 2 will now be discussed in Chapter 6.
Focus of the research

For this part of the study, in-depth information from five volunteer organisations was sought in order to meet the aim and objectives of this phase.

In view of the findings of Phase 1 and the results of the initial literature review, along with the many policy changes that were impacting on R&D management, the increasing emphasis on evidence-based practice, and the changing educational provision for nurses, the focus of Phase 2 was refined and developed to provide a wider investigation by exploring the situation in other NHS trusts. New literature has been appearing ever since on the topic, as reviewed in Chapter 6, and it has been seen that the issues identified in Phase 1 were seen elsewhere in the NHS.

In order to gain this information, the second phase was designed to work with several NHS trusts and an organisational case study approach was explored. This would make it possible to explore the situation within organisations in an in-depth way via an inductive approach. This in turn would facilitate the building of models of chosen approaches and strategies, and their impact on nursing research activity could be investigated. In order to identify suitable trusts for the case studies, an initial survey would be needed to gather broad data about how NR was organised, as a basis for selecting case study sites that seemed to have adopted different R&D strategies.

It was thought appropriate to choose an inductive approach as there was initially very little research in the UK about this topic; therefore no models were found to
evaluate, other than the American approach, which seemed to be geared towards a nursing research committee model (see Chapter 1). This model had not been found in the UK literature and so an evaluative approach to existing models of this type was not possible. An inductive approach allowed for the construction of models as information was gathered from each organisation: Holloway and Wheeler (1996) state that with inductive, qualitative methods:

'\textit{the researcher categorises, develops typologies and generates theoretical ideas}' (p157).

The impact of organisational models, if they existed, on nursing research activity could also be explored, and an inductive approach would also allow for exploration of the perceptions and experiences of nurses who were undertaking research, along with an analysis of the perceptions of other key trust staff such as R&D managers and lead nurses.

\textbf{Selection of the research design}

The research design had to reflect the chosen inductive approach and also to incorporate the fact that it was a multi-centre study working with more than one organisation, whilst gaining individual, specific information about each trust. It was therefore important to choose a design that enabled all these factors to be incorporated. An organisational case study design was chosen as an appropriate means to incorporate all these aspects of the study.

A case study is essentially an in depth investigation of an individual, group, institution or other social unit (Polit and Hungler 1993). Yin (1993) stated that case studies are essential for social science and that they are used extensively in
practice-orientated professions. They are important in the development of theory: Freud derived his theories of personality using this approach (Malim and Birch 1997) and Whyte's study of neighbourhood gangs in Chicago led to the development of theory (Whyte 1943). The purpose of this phase of the present research was to provide an in-depth study of nursing research within the NHS context, to add to the knowledge base of this developing field, and to consider the impact of this on nursing research and nursing knowledge generation. Organisational strategies to facilitate and support NR could be examined and analysed and there was the potential to build models of this support from the data generated. Case studies are an appropriate way of gaining this type of information (Gray 1998).

Jones and Lyons (2004) have debated whether or not case study research is a research design, method or strategy; they also state that there is, in fact, confusion over the terms 'design' and 'method', with the two often being used interchangeably. However, they believe that there is consensus that case study research is a 'comprehensive research strategy' (p72) in that it allows for the use of multiple sources of evidence and can dispel a polarised view of research design as it allows for triangulation, with the potential for using a variety of data collection methods to examine the same phenomenon. Yin (1994) rejects any attempt to associate the case study with a particular paradigm, that is, a positivist or interpretive epistemology, in view of the multiple methods open to researchers to use within the design. Others, however, argue that the case study can be strongly associated with qualitative research because of its emphasis on 'real' situations and their inherent descriptive qualities (Lincoln and Guba 1985), although they have been criticised for only considering the approach from an ethnographic
perspective (Pegram, 1999/2000). Hakim (1987) also argues that case studies are not purely qualitative and can be used to allow experimental research within natural settings. Lincoln and Guba's view is shared by Stake (1995), who believes that the case study is strongly associated with the uniqueness and wholeness of each case and that it generates theoretical propositions and builds theory. For the present study an interpretive approach was chosen, but this was not because of a belief that a case study approach sits entirely within this paradigm. It was chosen rather due to its appropriateness in achieving the research aims and objectives.

In establishing whether a case study approach was an appropriate strategy, several factors were taken in account in line with Yin (1989):

• The type of research question posed
• The extent of control an investigator has over actual behavioural events; and
• The degree of focus on contemporary as opposed to historical events.

Yin (1989) noted that case study research is suitable where a 'What?' research question is posed, where there is no requirement for control by the researcher over events and where material that is sought is contemporary. When considering these factors in relation to this phase of the research, the following became apparent:

• The study would be looking at whether NR strategies had developed within the organisational context of the NHS, and, if this was the case, what effect they had on NR and nursing knowledge generation
• The researcher did not need to have control over the situation as it was the organisational context that was being explored
The research study involved exploration of current nursing R&D within the present context, i.e. it would be contemporary as opposed to historical.

The use of a case study approach also encompassed a variety of methods of data collection. Yin (1989) outlines six potential ways of collecting data in case study research:

- Documents
- Interviews
- Direct observation
- Participant observation
- Archival records
- Physical artefacts

Holloway (1997) states that documents and observation are the most commonly used methods of data collection in case study research; however, for Bowling (1997), the approach is characterised by unstructured interviews and, where appropriate, observation and document analysis. For the present study, any of the first three methods would be appropriate means of data collection, for example interviews (with R&D nurses, R&D managers, other NHS personnel such as nurses undertaking research), direct observation within NHS trusts and document analysis (for example policy documents, research records and research reports). The data collected could potentially be either qualitative or quantitative, but qualitative data were expected to form the bulk of the data as an inductive approach was being used, with interview data predominating and informal observation of key participants and documents providing further information.
The study was designed to collect data over a two-year period to permit interviewing and direct on-site observation, as well as document analysis as appropriate.

The inductive nature of the study was refined further when considering the methodological concepts and analytical approach. Grounded theory was examined but not thought appropriate for several reasons. These were:

- The pre-existing work that had been undertaken in Phase 1, which informed the second phase and provided some background theoretical knowledge base
- The level of knowledge obtained from the literature already reviewed
- The need for the constant comparative method of data analysis (Bowling 1997) for grounded theory.

Constant comparison would be difficult in practice as organisations were to be visited at irregular periods, and the groups interviewed within these periods depended on access to participants at those given time periods. This potentially made it difficult to continually analyse data from one group of participants as interviews at each visit could be with people from more than one group or might not include members of a certain group.

Yin (1994) also rejects the use of grounded theory in case study research. He regards grounded theory as ethnography and argues that this is different to a case study approach, in that case studies require the development of a preliminary theory prior to data collection, and sees this theory development as 'essential' (p27) and part of the design phase, whether or not the purpose of the case study.
is to develop or test theory. However, those who see case studies as part of the inductive paradigm disagree and argue that researchers can apply phenomenological or ethnographic approaches (Holloway and Wheeler 1996).

For the present study, using grounded theory was not thought appropriate due to the pre-existing knowledge and theories derived in Phase 1. Alternative means of data analysis were examined, and Ritchie and Spencer's framework technique (1994) was considered to organise, handle and analyse the data using Microsoft Excel spreadsheets.

**Data analysis: framework technique**

This was developed as a means to analyse qualitative data in applied policy research in order to address four main groups of questions commonly associated with applied policy research:

- contextual, i.e. identifying the form and nature of what exists
- diagnostic, i.e. examining the reasons for, or causes of, what exists
- evaluative, i.e. appraising the effectiveness of what exists
- strategic, i.e. identifying new theories, policies, plans or actions (Ritchie and Spencer 1994 p174).

The present research was closely concerned with policy, and the questions tied in closely with the above. The study was planned to be contextual, in that it was set within the context of organisations and identifying policy and practice regarding NR. It was diagnostic in as much as reasons to explain the state of NR situation were being sought, and it was evaluating what was in place and aimed to identify models of practice.
There are five key stages to the framework (Ritchie and Spencer 1994 p178):

- familiarisation – immersion in the raw data to list key ideas and recurring themes
- identifying a thematic framework – identifying all the key issues, concepts and themes
- indexing – applying the thematic framework to all data, for example by annotating transcripts or documents
- charting – rearranging the data according to themes and forming charts containing distilled summaries of views and experiences and/or verbatim text
- mapping and interpretation – using the charts to define concepts, map phenomena, create typologies and find associations between themes

The framework approach is used increasingly in applied policy research where timescales are short or there is a need to link the analysis with pre-existing quantitative findings (Pope et al. 2000). It reflects the original accounts and observations of the people studied, so is 'grounded' and inductive, but starts deductively from pre-set aims and objectives. The framework is dynamic, in that it is open to change and amendment throughout the process of analysis, and comprehensive, in that it allows for full reviews of material collected whilst enabling easy retrieval of original textual material (Roberts-Davis and Read 2001). The analysis is designed so that it can be viewed and assessed by people other than the primary analyst (Pope et al. 2000). This adds rigour, in that the process of data analysis becomes transparent instead of opaque (Swallow et al. 2003).
When investigating which approach to use, the framework approach seemed ideal for Phase 2, which was informed by data deductively obtained in Phase 1. The aims of Phase 2 were set in advance after consideration of the findings of Phase 1, but in order to explore further and build models, an inductive approach was appropriate. The framework was therefore a relevant, structured approach which specifically allowed for these factors. Microsoft® Excel spreadsheets were used in conjunction with the framework to provide an alternative to qualitative software programmes; the Excel software package was readily available, easy to use but provided greater transparency than using manual methods alone (Swallow et al. 2003).

Funding and ethics approval

This phase of the project was unfunded. Ethics approval was obtained in two stages. For an initial information-finding survey of lead trust nurses, university approval was gained from the faculty research ethics committee (see Appendix 1). For the case study research itself, approval was gained from the appropriate NHS Multi-centre Research Ethics Committee (MREC) (see Appendix 2). As part of this process, an information sheet was constructed for all participants, and a consent form designed for case study participants.

It was assumed for the initial survey that anyone not wishing to participate would not return the questionnaire. Mulhall (1998) points out that:

‘... participants in surveys should be given sufficient information for them to make an informed choice about participating.’ (p164)

In order to achieve this, the questionnaire incorporated an information sheet about the study and contact details of the researcher.
Anonymity and confidentiality for participants were assured as part of the ethics process, along with the right to withdraw from the study at any time without prejudice. Trusts were not identified and names of individuals were not used in written reports. As the study did not involve NHS clients, the MREC did not require additional approval from each individual Local Research Ethics Committee (LREC).

Locating the target population

**NHS trusts**

The research proposal was discussed with the then NHS Regional Director of Nursing, who was very supportive of the project and viewed the proposal as extremely important in potentially raising the profile of research in nursing. It was thought appropriate to focus the study on one NHS region because the findings would serve the region, as well as informing nursing nationally via dissemination using national nursing publications and national conferences. She suggested that, as part of the study, nurse consultants should be included. This was a new role with, at that time, no formal evaluation, and one which had a research component (DoH 1999b); the regional office was keen to obtain some evidence about the role.

The Regional Director of Nursing offered to help recruit volunteers within the region by distributing, from her office, the questionnaire to all directors of nursing or lead trust nurses in the region. The questionnaires were to be returned directly to me in a freepost envelope and not to her office to ensure confidentiality and so that the responses were not influenced by her involvement. The questionnaire was a simple one-sheet form asking whether or not the trust had a general or nursing
research strategy in place or an R&D committee, or a person who coordinated NR in the trust, and asked if the trust would be interested in participating further in the study. In total, 30 questionnaires were distributed; 29 were returned.

At the time of the survey the NHS was in the process of change, with the creation of Primary Care Groups/Primary Care Trusts (PCGs/PCTs) and the dissolution of community trusts if they existed (although many organisations at that point were combined in order to manage both hospital and community services). There were, therefore, few identifiable PCGs/PCTs in existence at the time of the questionnaire distribution, and in discussion with the Regional Nurse it was decided not to specifically sample new organisations which were in the process of setting up; it was felt that few would have considered the R&D agenda as an immediate priority and that appropriate services for NR would not be well-established. However, responses were received from five PCTs (all former community trusts) who had established systems in place.

Identifying samples in qualitative research can be problematic (Reed et al. 1996), for example, deciding which site to select. Qualitative researchers have developed a variety of sampling strategies (see, for example, Patton 1990, Miles and Huberman 1994, Kuzel 1992). Miles and Huberman (1994) suggest the construction of a matrix containing potential study sites charted with key characteristics pertaining to the study. The results of the questionnaire were therefore plotted on a matrix in order to identify key characteristics and potential participants (see Table 6.1). This approach enables selection of sites which ensure access to the types of data required to further the aims of the research, and can also aid with selection of different organisational settings. The matrix
therefore provides maximum opportunity for both depth and variation in a small sample (Reed et al. 1996).
<table>
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<th>Type of organisation</th>
<th>General R&amp;D strategy</th>
<th>R&amp;D Committee</th>
<th>NR strategy</th>
<th>Who is responsible for NR</th>
<th>Interested in participating</th>
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</table>

Table 6.1 Matrix of key characteristics of potential participating organisations
Key to abbreviations: DGH = district general hospital, HOP = hospital for older persons, TTH = tertiary teaching hospital, MHT = mental health trust, SH = specialist hospital, CH = community hospital, MHPT = mental health partnership trust, TPCT = teaching primary care trust, TH = teaching hospital, PCT = primary care trust. DoN = director of nursing, DNS = director of nursing services, PON = practice development nurse, R&D = research and development, CG = clinical governance, ROSU = research and development support unit, NR = nursing research, PL = principal lecturer, CNS = clinical nurse specialist, HEI = higher education institution.

Table 6.1 (cont.) Matrix of key characteristics of potential participating organisations

The five trusts eventually chosen fulfilled certain inclusion criteria (see below) and were a purposive sample. This is a deliberately non-random, non-probability method of sampling aiming to sample settings with particular characteristics, and is often used in qualitative research (Bowling 1997). The results from a purposive sample are not generalisable to the wider population, but this is not the aim of case study research; the aim is to provide in-depth, rich data in order to understand complex phenomena and generate hypotheses (Bowling 1997) that can potentially be transferable to other settings.

Initially, before the survey was carried out, it was thought that many trusts might have a NR strategy in place, and it was planned to choose those with such a strategy and in addition possibly one ‘negative case’ to act as a baseline against which to compare the other trusts. However, when the questionnaires were returned it was apparent that, in fact, only a minority of organisations (n=5) had a NR strategy in place (and one of these was the trust involved with Phase 1 of the study). However, most outlined other structures that were in place, such as a named person who was responsible for NR facilitation.
The inclusion criteria were therefore reviewed and amended to reflect this.

Organisations were chosen which met at least one of the following criteria:

- Nursing R&D coordinated by the lead nurse or their deputy
- The presence of a specific staff member with responsibility for NR coordination other than the lead nurse
- The existence of a formal strategy for R&D overall
- Presence of other specific, identifiable method of NR coordination such as a NR strategy

(The term 'lead nurse' as used here refers to the most senior nurse – for example, the executive nurse or director of nursing - in the organisation.)

As there were a variety of approaches, it was felt inappropriate to include a 'negative case' as there would not be a common approach in all the other trusts with which to compare this (there were, in fact, no 'negative cases' as there was no single unified approach). Instead, it was decided to choose a variety of approaches in order to gain information about the differing ways in which NR was supported. In addition it was decided to choose a variety of healthcare organisations to gain a perspective of the support available in several very different trusts. It seemed possible at this stage that the nature of the organisation might have an effect on the type of support in place.

Many trusts indicated on the questionnaire that they would be interested in taking part in the study (n=15). Others expressed a possible interest (n=10). Only four declined altogether to be involved. Five organisations were initially approached who met the revised criteria and had said they were interested in participation; I
went to see the lead nurse in each trust to explain about the project in more depth, answer any questions and provide with details of the MREC approval. All five agreed to take part.

The total number chosen represented a manageable number of cases within the timeframe of the research and represented a wide range of NHS care provision from a large, well-established regional teaching hospital through to a newly-created teaching PCT. Mental health and learning disability partnership trusts had recently been created. (A partnership trust is one where health and social care are combined to provide a seamless approach to care for clients who need the combined input of both types of service provision.) One such organisation was chosen: this had been a pilot trust for this new approach to care. Two other secondary care trusts were chosen: one district general hospital in a cathedral city and one newly-created teaching hospital where preparations were being made to educate undergraduate medical students for the first time. These five trusts also all had differing approaches to the support of NR, as summarised in Table 6.2.
<table>
<thead>
<tr>
<th>Nature of trust</th>
<th>Type of approach</th>
<th>R&amp;D strategy</th>
<th>R&amp;D committee</th>
<th>NR strategy</th>
<th>Acronym used for the thesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust 5. Regional tertiary teaching hospital</td>
<td>Practice development nurse facilitates NR</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>PDM (Practice development model)</td>
</tr>
<tr>
<td>Trust 18. Newly created teaching hospital</td>
<td>Nursing research coordinator facilitates NR</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>NRCM (Nursing research coordinator model)</td>
</tr>
<tr>
<td>Trust 19. MH and LD partnership Trust</td>
<td>Director of nursing who holds a joint appointment as a PL with local HEI facilitates NR</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>JAM (Joint appointment model)</td>
</tr>
<tr>
<td>Trust 29. District general hospital</td>
<td>Director of nursing, previously a nurse educator, facilitates NR; collaboration with local HEI</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>DNM (Director of nursing model)</td>
</tr>
<tr>
<td>Trust 15. Teaching primary care Trust</td>
<td>Head of development: research and education, facilitates NR</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>HDM (Head of development model)</td>
</tr>
</tbody>
</table>

Key to abbreviations: R&D = research and development, NR = nursing research, MH = mental health, LD = learning disabilities, PL = principal lecturer, HEI = higher education institution

Table 6.2 Organisations selected to take part in the research

In conclusion, it can be seen from Table 6.2 that the matrix had enabled the selection of trusts using a variety of approaches, and also that a variety of types of organisation had been easily identified and selected. It provided an ideal format for summarising the results of the survey and it highlighted the diverse approaches to NR in NHS organisations in the region. This made sample selection more structured and transparent, with a clear decision trail for the rationale for selection of cases.

Locating participants within trusts

When the organisation had agreed to take part, contact was made with the lead person for NR named on the questionnaire. These people were all seen individually if they had not already been seen and the project explained, and their role in it outlined. All agreed to work with me over the projected two-year period.
After discussion with NR leads in each trust, together with my experiences when collecting data for Phase 1 and the results of the literature review, four main groups of staff were identified as key when gathering in-depth data:

- Lead nurses (or their deputies)
- R&D managers and directors (to include lead NR facilitators/coordinators)
- Nurse consultants
- Nurses undertaking research.

Those in the first three groups were easily identifiable within each organisation. In discussion with the lead nurse or NR facilitator, key individuals in the trust were identified. It was planned to ask all individuals in the first three groups to participate, and so it was not necessary to devise a sampling strategy for these.

Snowball sampling enabled key people to be identified within the fourth group; in practice, the lead NR coordinator in each trust was able to provide many contacts. Participants were also able to identify others, for example nurses undertaking research for an award were able to contact peers they had studied with, and some lead nurses knew which nurses were doing (or had done) Master's degrees.

There was no 'sampling frame' within the organisations to identify nurses undertaking research. Although some organisations had databases with names of researchers which they were in the process of compiling to comply with Culyer recommendations (DoH 1994a), most were initially concentrating on obtaining full details of medical research projects as these were seen as the most likely to attract funding. This meant that a probability random sample within this group was not possible (DePoy and Gitlin 1994) but the qualitative nature of the research
meant that a snowball sample was an acceptable way to recruit participants (Bowling 1997).

**Designing the fieldwork**

In organisational case study research, cases are intensively explored using a variety of methods (Yin 1994). The main methods appropriate to this phase were planned to be flexible, but three main data collection tools were seen as the most likely means of gathering information. These were interviews with key personnel, informal observation within trusts and document analysis if this was relevant.

Following consultation with the people coordinating NR in each organisation, it was decided to spend time in each trust, a week at a time, over a two-year period, with each trust being visited for two or three weeks per year. The exact time to be spent in each organisation was kept flexible to allow for the size of the organisation and numbers of people to be seen. Key people to be seen had already been identified, as described earlier in this chapter.

In three of the organisations (PDM, NRCM and HDM: See Table 6:2) the lead person coordinating NR invited me to spend time with them in informal observation, ‘shadowing’ them over the course of a working week where appropriate to the research and undertaking other data collection when they were involved in other activities (All three had other responsibilities as well as NR facilitation. For example, the practice development nurse in PDM also coordinated nursing practice development throughout the Trust, whilst the NR coordinator in NRCM spent two days per week on this and three in a different educational role in the Trust. In HDM, the head of development was also responsible for education
and coordinated the Trust's newly awarded responsibilities as a teaching PCT. In DNM and JAM, the DoNs provided names of key people to liaise with when planning visits who would provide me with office accommodation and links to other personnel. These were both deputy directors of nursing.

**Interview guide**

Interview guides had already been designed when ethics approval for the study was obtained. This was a requirement for MREC approval. The guides were based on the results of the literature review and also the findings of Phase 1 of the research. Although the interview guides were semi-structured, early interviews were found, on listening to tapes and reading transcripts, to be the least structured, with more structure evolving later in the study as certain themes emerged which were explored with participants as more interviews were carried out. Rose (1994) also describes how this happened in her study, but states that the exact interview type is less important than remaining open-minded and being sensitive to the needs and abilities of interviewees.

Two interview guides were devised: one for staff supporting NR, and one for nurses undertaking research. For the staff supporting NR, questions to be asked were about:

- trust policies and procedures for nursing R&D
- day-to-day management of nursing research
- how nurses were supported when undertaking research
- educational opportunities and arrangements for nursing staff and support staff
- procedures for recording research activity
• integration with wider trust R&D management procedures.

The purpose of interviews held with nurses undertaking research was to gain their perspective on the nature and type of support offered by the trust, and the ease or otherwise of undertaking research activities in addition to their usual roles. Questions were designed to explore these topics, such as:

• type and level of support from the organisation
• opportunities to undertake research
• barriers to undertaking research
• incorporating research activity into their usual role
• attitudes of colleagues and other healthcare professionals to nurse researchers
• knowledge of trust policies and procedures for nursing R&D activities
• educational / other preparation for role as a researcher.

Informal observation

A variety of types of observation can be used in case study research. Yin (2003) refers a range of techniques from ‘formal’ observation, where observation is highly structured and measurable, to ‘casual’ where, for example, observation of the office environment can lead to information that can be interpreted as an indicator of status (p92). Vallis and Tierney (1999/2000) prefer the term ‘informal’ to casual, using it to describe how they informally observed care and talked informally with patients (p24-25) to gain background information and build a picture of the environment. Yin (2003) distinguishes this type of observation from participant observation (where the researcher is not a passive observer but participates in events or works in the organisation as part of a team); other terms that could be
applied include non-participant observation (Bowling 1997). For this study, the term informal observation is used to denote observation that was of a mostly non-participant nature and non-measurable in the sense of not having a structured observation schedule. This informal observation was designed to be flexible, as it was not possible to observe every lead NR facilitator. This was possible within three organisations, as outlined above, but in the two organisations where the DoN was the main facilitator it was not possible to spend time with them other than for interviews and brief meetings due to their wide-ranging commitments.

Where observation was possible, I spent time in the working week shadowing the lead facilitator, for example accompanying them to meetings with nurses undertaking research, going to relevant committee meetings with them, going with them to relevant educational workshops about research or to meetings outside the organisation with appropriate contacts such as HEIs, or going to meetings where they were advising staff on putting research into practice – the development part of their R&D roles (this was especially in PDM, where practice development was closely tied in with R&D activity and published research). Permission was sought for me to attend beforehand, and I asked any questions or sought clarification after these meetings wherever possible. Usually my role was non-participative, but on occasions I would be asked questions – usually technical questions about the research process - in my role as a researcher, either by the facilitators or others in the meetings, and I was used as a resource on several occasions. Time was also spent informally talking to the facilitators about their role and responsibilities.

During the observation periods notes were taken at the time about the main purpose of the event, nature of the discussions and role of the facilitator. The idea
of the observation was not to provide an exhaustive account of each event but to gain an overall impression of the type and nature of activity inherent in the lead NR facilitator's role and how this related to support systems for nurse researchers.

**Document analysis**

It was anticipated that certain documents, such as nursing R&D strategies (where they existed), would be analysed but that the bulk of the data would be from interviews, with informal observation providing background information. Yin (1994) views documents as important in corroborating and augmenting evidence from other sources rather than as literal recordings of events that have taken place, and states that it is important for the researcher to understand that the document was written for purposes other than those of the case study.

**Rigour**

Demonstrating a rigorous, systematic approach is important in all research to evaluate the processes and findings. As the data were predominantly qualitative, it was decided to use the Lincoln and Guba (1985) guidelines for establishing trustworthiness. Trustworthiness is said to exist when findings of a qualitative study represent reality (Holloway and Wheeler 1996). Trustworthiness has four components: credibility, transferability, dependability and confirmability. Each component will now be examined and the measures taken to fulfill them outlined in order to demonstrate that the research is trustworthy.

**Credibility**

Establishing credibility involves demonstrating that those participating in research are identified and described accurately (Holloway and Wheeler 1996). It is
comparable with internal validity (Tobin and Begley 2004). Researchers are also
advised to describe and interpret their own experience as researchers (Koch
1994) to enhance credibility. Robson (1993) describes several actions can
improve credibility: persistent observation, prolonged involvement, peer debriefing,
triangulation, and member checks.

The procedures for identifying participants have been discussed in the section on
sample selection already in this chapter, where it can be seen that potential
organisations were identified following a survey. The main features in the
organisations were shown using a matrix as recommended by Miles and
Huberman (1994). Selection of individual participants was also described. My own
perceptions and reflections will be described in the reflective section later in this
chapter.

Prolonged involvement and persistent observation were ensured by spending
several weeks each year with each organisation over more than two years. This
enabled me to build up a trusting relationship with participants and allowed me to
study in-depth what was most representative and relevant in order to meet the
aims and objectives of the research (Holloway and Wheeler 1996). It also enabled
me to ‘absorb the culture’ in each organisation as recommended by Gillham
(2000). This period continued until representatives from all groups had been
interviewed and no new information was emerging.

Peer debriefing was achieved by presenting data analysis and conclusions to my
supervisors on a regular basis throughout the data collection and analysis period.
It was also enhanced by presenting findings regularly at conferences and seminars and via publications for a wider professional audience to critique.

There is no clear agreement on the meaning and purposes of triangulation in research (Bellman 2003). Triangulation has been defined as the technical term for two or more methods of collecting data (Shipman 1988). However, Denzin (1978) identified four types of triangulation: using multiple data sources, using several researchers, using multiple methods to interpret data and using multiple methods to study a research question. In this study, three triangulation techniques were employed: the use of multiple data sources, the use of multiple methods and, to a lesser extent, the use of multiple methods to interpret data (It was not practical to use multiple researchers as this was research for an individual academic award and was mainly unfunded, although supervisors were involved as described above). Multiple data sources were the five different organisations (and within these, four groups of staff, documents and observational data). The multiple methods used, as identified previously, were interviewing, observation and document analysis. Finally, multiple methods were used for data analysis; the survey used in Phase 2 to identify participants was initially analysed quantitatively using SPSS® for frequencies. Also, the influence of Phase 1 on Phase 2 should not be ignored; this had already used a survey which was analysed statistically and had highlighted issues to be taken forward to Phase 2.

Yin (2003) identifies that the use of a multiple-case design with multiple sources of evidence within each case provides more compelling evidence, with the result that the overall study is considered more robust. He refers to these as sophisticated ‘multiple-case, embedded designs (Type 4)’ (p39). The design of this study can be
seen to meet the requirements for triangulation, which adds to the robustness and credibility of findings.

Member checks involve those who have participated in the research in checking the research findings to make sure they are true to their experience (Lincoln and Guba 1985). This was achieved by discussing ongoing overall results of the analysis with participating trusts at each visit as the study progressed. Member checks can also involve taking transcripts of interviews to participants for validation, as advocated by Colaizzi in phenomenological data analysis (1978). There has been debate about the merits of member checks of transcripts or seeking elaboration of meaning from participants. Poland (2003) identifies the potential to create anxiety in respondents when they see their words in print, especially if the material contains sensitive comments about colleagues or employers, with associated attempts to change or retract statements. Hoffart (1991) also comments on attempts by interviewees to clarify, justify or revoke particular aspects. Sandelowskii (1993) identifies theoretical, moral and ethical difficulties that may actually serve to undermine trustworthiness, and rejects the notion that information previously collected can be simply checked, corroborated and/or corrected, seeing it rather as time-bound with participants constantly refining and reinterpreting their personal realities as they try to find order and meaning in, or live with, events from a particular moment in their lives.

It was decided not to provide participants with transcripts for member checking for two main reasons. Firstly, due to the potentially sensitive nature of the interviews, it was necessary to avoid creating anxiety and also to avoid the alteration of data for 'political' reasons. (Many participants had stories to tell about employers,
managers and/or colleagues that could be construed as critical or disloyal. The temptation to then alter these when seen in print could be considerable.

Secondly, interviews were not transcribed immediately and there was often a considerable time delay before I was back in any one trust collecting further data. Participants would therefore be less likely to have exact recall of the interview, and recall bias (Bowling 1997) may have occurred.

Instead, a random selection of taped interviews and the associated transcripts were given to the PhD supervisors to check for accuracy of transcription and interpretation. It was, however, decided that if participants actually requested a copy of the transcript one would be given. In the course of the data collection only one participant requested this; however, when I attempted to transcribe the tape recording, external traffic noise made it inaudible. The data from this interview were not therefore used in the analysis. The participant left the organisation before I was able to appraise her of the situation.

Transferability

Transferability is the qualitative equivalent of external validity (generalisability), where readers have to consider whether or not findings are transferable to another setting (Holloway and Wheeler 1996). Judgments are made according to sampling techniques and the soundness of the theoretical framework used; the decision trails used for these processes allow others to decide this (Holloway and Wheeler 1996). In this study, the decision trail for sampling strategies, as examined above, has demonstrated a clear sampling approach appropriate for qualitative case study research. The theoretical framework, i.e. the case study strategy, has also been previously examined in this chapter to provide a clear decision trail justifying
the choice of research design and specific methods used within this. This allows, therefore, for others to consider the transferability of findings to other settings.

Yin (2003), who uses the concept of generalisability rather than transferability when discussing case study research, uses the term 'analytical generalisation' to distinguish it from statistical generalisation. He ties this in with the theoretical development of the research. The researcher is aiming to generalize a particular set of results to an idea or concept. With a multiple case study project, if two or more cases are shown to support this, 'replication may be claimed' (Yin 2003 p33), which provides strong support and thus allows for analytical generalisability. This will be demonstrated in Chapter 7, where it will be seen that the themes emerging from all five trusts overlapped considerably and led to the construction of an overall model of factors influencing NR activity for all organisations, thus providing replication and fulfilling Yin's (2003) concept of analytical generalisability.

**Dependability**

Dependability is comparable to reliability (Tobin and Begley 2004). It can be achieved through a process of auditing via a decision trail to track all decisions made in the process of research (Koch 1998, 2004). This can be achieved by an external 'auditor' auditing the decisions, analytical processes and methodology of the primary researcher (Lincoln and Guba 1985). Based on the information, the auditor will make an independent assessment of the study. Koch (2004) also advises a reflexive journal to record:

‘methodological developments/decisions, theoretical insights and... one's own emotions and responses.’ (p134)
Not all agree with this: Cutcliffe and McKenna (2004) argue that audit trails are an exaggeration of method, and do little to establish trustworthiness. However, this is tied in with the concept of the ‘expert’ qualitative researcher and the parallel is made with Benner’s (1984) notion of the expert nurse. Expertise uses prior experience to provide an intuitive grasp of issues without having to rely on rules or guidelines to enable understanding of the phenomenon. Rose and Webb (1998) see the expert researcher as using a different process of qualitative analysis, with the expert integrating the process rather than using a series of discrete steps.

Webb (1999) refers to gaining intimacy with the process and a feeling for, and familiarity with, the data. This leads to an almost physical experience as:

‘ideas almost literally flow up one’s arm... enter one’s brain and then flow back onto the paper on which the analysis is written.’ (p329)

She refers to this intuitive process as ‘Webb’s osmosis method’ (p329).

However, the processes used to demonstrate an audit trail are important for novice researchers, who need rules and guidance (Koch 2004), and these need to be visible to readers. Koch (2004) recommends that novice researchers follow guidelines to demonstrate trustworthiness as experience of qualitative research is built up, whilst Webb (1999) advises novice researchers to use manual analytical methods and a reflexive approach at first to provide a firm basis for development of research skills and demonstration of rigour.

In order to demonstrate dependability, all decisions on research processes were discussed. For example, ‘data challenges’ (as described by Lingard et al. 2002) were undertaken where supervisors looked at selections of data and my analysis of these, challenged me about findings and asked me to defend and explain the
processes leading to my conclusions, in a process similar to the 'mini viva' (Murray 2003). Analytical processes were made structured and transparent (see, for example, the section below on data management and analysis) by using the framework technique. All steps were documented and this thesis provides a written account of the whole process for external, independent audit purposes. The thesis aims also to incorporate a reflexive account, and a reflective account of the methodological processes will be provided at the end of this chapter. Holloway and Wheeler (1996) state that dependability is reliant on credibility: a qualitative study that is credible will also be dependable, whilst Koch (1994) advises discussion of explicit decisions taken about theoretical, methodological and analytic choices throughout the study. This chapter demonstrates that these processes have been followed by using the structured framework of trustworthiness when planning, designing, implementing and analysing the research in order to ensure the process of research is logical, traceable and clearly documented (Schwandt 2001).

**Confirmability**

This is the fourth criterion for achieving trustworthiness and means that data are linked to their sources for readers to establish that conclusions and interpretations arise directly from them (Holloway and Wheeler 1996). Audit trails and reflection are seen as one way to confirm findings (Lincoln and Guba 1985). Tobin and Begley (2004) describe confirmability as comparable with objectivity or neutrality in order to establish that findings are not 'figments of the inquirer's imagination' (p392). This can also be aided via the use of quotations from participants when reporting interview data (Slevin and Sines 1999/2000). I find these illustrate the data in much the same way that pictures illustrate children's story books, by
placing them in context and providing a powerful tool for story telling. This in turn engages readers and prompts understanding (Koch 1998). Koch and Harrington (1998) comment that research texts need skilled writers to guide critical understanding. Direct quotations are used in Chapter 7 to aid this, in addition to the use of a decision trail as discussed previously.

Implementing the research

Visits to trusts commenced when ethics approval and consents from individual organisations had been obtained. In planning visits, preparations were made by getting together fieldwork tools such as notebooks, recording equipment in working order (a portable tape recorder, spare batteries and tapes), stationery such as paper, pens and pencils, a laptop computer, and copies of the ethical approval letter, consent form and information sheet. Tierney (1997) comments on the need for careful practical preparation in order to avoid delays to data collection. Equipment was checked prior to each week’s visit in order to maintain this and ensure that adequate supplies were available.

The initial week’s visit to each case study site was to establish communication links, meet key NR facilitators and gain an overview of the nature and type of organisation. Informal observation was the main form of establishing this, along with shadowing and networking with contacts such as NR facilitators. A notebook was kept for each organisation to record reflexive accounts of events and interpretations of these, along with reflections on my reactions and experiences, for example reflecting after an interview on the event. When there, initial meetings enabled me to identify and make a list of key people to see and interview with the help of the contact person in each trust.
Three organisations gave me a permanent base to work from. This consisted of a desk in an office shared between the director of nursing and her three deputies in PDM, worktop space in a room used by practice educators in DNM, and sharing an office with the NR coordinator in NRCM. The two other organisations, JAM and HDM, did not offer office accommodation but I was able to use empty meeting rooms if available.

Subsequent visits involved interviewing participants, attending meetings and examining documents. A laptop computer was taken on visits, in addition to the paper notebooks, to record notes and write up events such as meetings as soon as possible after they happened. This helped in two ways: it ensured that my accounts of events were written as soon as possible following the event, which helped reduce problems remembering information, and it also utilised spare time, as inevitably there were periods in each week when it was not possible to directly carry out data collection. It also enabled ongoing reflection. Putting the information directly onto a laptop computer made it legible and immediately available for use on my desktop computer.

Visits went on for a period of just over two years, and vast quantities of information were collected, especially in initial stages. This is a common problem; Vallis and Tierney (1999/2000) also describe how they were inundated with data and how the fieldwork was complex and time-consuming. Yin (2003) states that a case study places demands on intellect, ego and emotions that are ‘far greater than any other research strategy’ (p58) because data collection is not routine, and there is a continuous interaction between theoretical issues being studied and data being
collected. The researcher needs to be flexible and able to take advantage of unexpected opportunities. I realised after data collection had begun that in fact the interview data would provide the bulk of the information needed, once the profiles of individual organisations had been built up from informal observation and knowledge-gathering when in trusts (These profiles were built up quickly within the first few visits). My data collection plans were flexible enough to allow for this, and subsequent visits then mostly concentrated on accessing individuals to interview and carrying out the interviews.

Only three people declined to be interviewed when approached. The Director of Research for NRCM stated he was too busy but put me in touch with a research nurse whom he felt could give me useful information. The Director of Nursing in DNM unfortunately was on prolonged sick leave and then left the organisation; her replacement declined to be interviewed. However, the Deputy Director of Nursing who was my day-to-day contact in the organisation was happy to be interviewed and was able to provide the perspective of the nursing executive. One nurse consultant in critical care, also from this Trust, cancelled three interview appointments due to pressure of work (the Iraq war was in progress and the Trust was taking in casualties flown in from the armed services). In view of this, a further appointment was not sought.

Overhauling the data

Interview data

In total, 68 interviews were undertaken. Two of these were not used as the tape quality was too poor for transcription. Sixty-six taped interviews were therefore available for analysis.
Before this analysis could commence, the information on the tapes needed to be available. Tapes were initially transcribed verbatim in full. Poland (2003) notes that attention to transcription quality has yet to become routine practice in qualitative research, with few research texts incorporating substantive discussion of how to monitor and improve transcription quality. He suggests strategies to improve this, including means to improve tape recording quality, careful choice of transcribers, careful review of transcriptions, use of field notes and reporting on steps taken to ensure quality in research reports.

I transcribed all the interviews with nurse consultants. In the later stages, as the tapes mounted up, help was sought with this process; two people familiar with transcribing nursing research interviews were employed to continue this process. All the tapes for managers and lead nurses were then transcribed, and some of those for nurses undertaking research. The tapes and transcripts were then checked by me; I listened to the tape and read the transcript (a word processed document) at the same time and amended any errors, then listened to the tape once again to ensure as far as possible that corrections were accurate. A few errors were found; these were mostly surrounding the use of technical terms with which transcribers were unfamiliar, or as a result of poor tape quality. A selection of tapes and transcripts was reviewed by the PhD supervisors for accuracy. Analysis of the data then commenced.

As the study progressed, a large number of tapes amassed and it was difficult to see how full transcription could be achieved within the time limits. Poland (2003)
suggests that, with large studies, researchers should consider not having all of the
interviews transcribed in their entirety, but could instead listen to tapes and identify
sections for transcription, or review a subset of transcripts to highlight themes and
phenomena around which to focus subsequent analysis. This would also:

'... avoid the possibility (in larger studies) of their being overwhelmed by the
volume of material to be analyzed.' (p281)

In view of the increasingly large numbers of tapes, and the short timescale for the
remaining analysis, a decision was made in conjunction with my supervisors not to
transcribe all the tapes for nurses undertaking research in full (Analysis had, by
this time, taken place for all the other groups and key themes had already
emerged from these). Some tapes in this group had already been transcribed, and
when transcripts for these were analysed, the key issues and emerging themes
from this group were noted. Instead, the remaining tapes were listened to in full by
me, notes were made as I listened, and relevant or new information recorded.
Appropriate sections of the tapes were transcribed, for example noteworthy
discussions that could be incorporated as a quotation or new factors. Tapes were
then listened to again to ensure that no important information had been missed.
This was at the end of the analytical process and the interviews confirmed
previous findings with the exception of one new factor which was added to the
coding frame.

Other data

Documents obtained included policy documents. R&D strategies (some for the
trusts overall and some specifically for nursing) were the most relevant of these.
There were also minutes from meetings and reflective notes. Reflective notes
were made after many interviews; these were reviewed after each week's visit to
the organisation and also in conjunction with transcripts. These notes mostly concerned the interview process itself, and were especially useful in early stages as I was a novice interviewer. However, some did highlight difficulties with the recording process which was useful in overcoming initial recording problems. Documents were examined and notes were made of the main areas relevant to NR.

Observational notes yielded further information that was also made accessible for analysis: this was mostly already computerised but some data were in note form and relevant information was extracted by hand.

A major part of the process of overhauling this part of the data was sorting out relevant information from that of limited use. I had collected a vast quantity of information, but much of it was of limited value. Burnard (1995) and Field and Morse (1985) refer to 'dross' in qualitative research: this is data collected that are not relevant and can be cut from the analysis. In going through documents and papers collected, it was apparent that much could be called dross: some were useful for background information, and a small amount was directly relevant, but a great deal was not used in the final analysis.

**Analysing the data**

Data analysis followed the framework technique outlined above. The analysis of the case study was done in several stages as it was a multiple-case embedded design (Vallis and Tierney 1999/2000). These were: analysis of separate data sets, single case analysis and cross-case analysis.
Analysis of separate data sets

The individual data sets (interviews, documents and observational evidence) were each analysed separately. Interviews formed by far the largest group in this set and the volume of data was enormous. Familiarisation with the data (Stage 1 of the framework) involved listening to tapes and reading transcripts repeatedly. Notes were made in the margins of transcripts and emerging issues, ideas and themes were noted on each text. Different coloured highlighter pens were also used to highlight key words, phrases or sentences that occurred in transcripts as more commonalities emerged.

As themes emerged, a thematic framework was developed (Stage 2 of the framework). (These are included in Chapter 7.) A coding frame was then applied manually to transcripts (Stage 3: indexing) (or sections for the tapes that were not fully transcribed) and data were then 'lifted' to the spreadsheets which were designed thematically (Stage 4: charting). (An example of a framework spreadsheet is enclosed in Appendix 3.)

Presenting data in this way enabled synthesis, mapping and interpretation of findings (Stage 5) to be undertaken in a transparent way.

Documents and observational notes were examined looking for ways in which they supported or illuminated different aspects of the interview data (Vallis and Tierney 1999/2000).
Single case analysis

Single case analysis involved looking at overall results from all data sets for each organisation in order to construct comparable accounts of NR activity and organisational support in each of the five centres and construct models of these.

As the analysis was done, the potential for ‘chains of evidence’ (Yin 2003 p 105) was found, where results from one source of evidence were supported by results from another (For example, documents outlining R&D procedures within organisations confirmed the accounts by nurses within those organisations of procedures they had followed in order to undertake the research). Yin (2003) identifies that this adds to the rigour of research and uses the term reliability; this is comparable with dependability (Tobin and Begley 2004).

From this analysis, profiles of all five organisations were compiled and models of organisational support for NR were mapped. This formed the basis for the more complex cross-case analysis.

Cross-case analysis

This was done to try and identify similarities and differences among and between the five trusts, and from this to build explanations of whether differing approaches to NR facilitation might influence NR activity. It also enabled group analysis across cases amongst the four groups of staff interviewed (lead nurses, managers, nurse consultants and nurses undertaking research) in order to look for commonalities and differences in each group.
Cross-case analysis is the most difficult part of case study research and its actual processes are very poorly defined (Yin 2003, Miles and Huberman 1994, Vallis and Tierney 1999/2000). However, I found that using the framework approach made this easier: data from spreadsheets could be cut and pasted onto new sheets easily, which enabled combining of data sets to be done in a structured, formal, transparent way. Miles and Huberman (1994) also recommend the use of large charts or matrices for comparing and contrasting differences between cases. One group was very large (nurses undertaking research) so thematic framework spreadsheets were then also summarised on charts for this group for ease of comparison.

Limitations

The main criticisms of case study research surround the representativeness of the case and rigour in the data collection and analysis that could be associated with bias on the part of the researcher and research participants (Bryar 1999/2000).

Issues of representativeness have been discussed above: it is not claimed that this research has external validity via statistical generalisation, but that a) the findings may be transferable to other settings, although this would need to be tested by those intending to use them in other settings and b) that it meets Yin’s (2003) criteria for analytical generalisation.

Rigour in collection and analysis of data associated with researcher and participant bias can be reduced by careful selection of the case, and clear descriptions of the methods used, along with a consideration of the place of the researcher in the study. All researchers approach research with pre-existing ideas
and opinions and influence the process (Lipson 1991); self-awareness can help reduce the potential effects of this. I had to be aware of my own enthusiasm for research and appreciate that many do not share this and see research as unrelated to practice (Hicks 1995b, Hunt 1997). Bias in participants is difficult to gauge and it could be argued that, because cases were chosen from a sample who were interested in participating, there was some organisational bias or agenda (i.e. the results might have been different for organisations who did not want to participate). However, within cases, a broad range of participants was seen and practitioners as well as managers were involved; this should have ensured collection of evidence from a variety of sources within each case to try and limit this problem.

Writing up the results

The results were written up in stages as analysis progressed, although the bulk of the writing was done after analysis was completed (A separate detailed report was compiled on the complete findings for nurse consultants in view of the request from the RNO for some of the research to be focused on this group. Two papers were prepared and accepted for publication from this data in view of the newness of the role and the lack of associated research; these are enclosed at the end of the thesis.) Quotations were used to illustrate findings. Results were written in two sections: the first was the profiles of the organisations and models identified, the second was results of the cross-case analysis and development of a theoretical model of factors influencing NR activity. This took a long time: the study was large and complex and the analysing the data resulted in a huge amount of relevant information.
Reflection and evaluation

The methodological processes were reflected on throughout the course of the study, both in written form by keeping a journal and in discussion with supervisors, in order to enhance both learning and rigour. In addition to the reflexive account of the methodological processes provided above, particular aspects will be briefly noted here that were key 'milestones' in both my personal development and the research progress.

When choosing the design I was aware that it was a potentially large study, but I did not appreciate how complex the use of Type 4 case studies would be. Yin (1994) recommends that case studies are undertaken by 'a well-trained and experienced investigator' (p55). This dawned on me early on in data collection when large amounts of material were being collected, and the number of people to interview became apparent. Although experienced in survey research methods, I had no direct experience of case studies and no experience of undertaking qualitative research. It seemed to be an overwhelming task. This prompted me to undertake much reading on the method, plan carefully my timetable for the project and discuss issues and processes with supervisors, who were very experienced in using case study designs and/or qualitative approaches. I learned a lot in a very short space of time about working with a variety of organisations, and about practical, day-to-day aspects of collecting data within these.

Initially when interviewing I felt self-conscious and awkward. The first interview undertaken was with a highly skilled NC, who had been an educator and
researcher before taking her NC post. I suspect that she could sense my nerves and discern that I was a novice. I did not stick to my interview topic guide, but she was very helpful, non-judgmental and extremely keen to tell her story, which gave me confidence to listen to her perspective and forget my initial discomfort.

Communicating with those who did not want to be interviewed was also a steep learning curve. The Director of Research in NRCM refused to see me on the grounds of workload. He was very abrupt in manner and wanted to know who I was seeing, what methods I was using, which other trusts I was working with, why was I working with certain people (whom he did not recommend), and finally, whether I would undertake a review of research opportunities for AHPs whilst I was there, as someone else should have done it but had not. My reflective notes at the time stated:

'A forceful manner... I think he overstepped the mark considerably here – this is an independent study and he has no right to try and alter the focus or get me to do a job that someone else is slow in doing. I wonder if he would have tried to direct a fellow medic's research in quite this way. I found this [the comments on a colleague] disconcerting – I am a total stranger – I would not have made such forceful comments to a complete stranger over the telephone about a colleague... But I did feel I was able to hold my own by declining to undertake the Trust work and also by refusing to divulge the other organisations' identities.'

The conversation initially made me angry, but when I reflected on it I was able to see that he was trying to ascertain what the research was about and give some useful suggestions – he gave me the name, for example, of a research nurse who had done a PhD under the regional PhD studentship scheme and held a post-doctoral research fellowship. He also gave me valuable details of people in the R&D management office who could help. It taught me to listen to underlying messages rather than be irritated by tone and manner, and highlighted a personal weakness: over-sensitivity to perceived criticism.
Early on, when reviewing initial tapes, I discovered the effects of, for example, background noise on tape quality. One interview was carried out with a NC in her basement office. This had pipes running in the ceiling that clattered and creaked. Although I did not notice it at the time of interview, it was an over-riding noise throughout the tape, and made transcribing very difficult, although I managed to eventually do this after many hours at the transcribing machine. After this, I made attempts to improve tape quality and mostly succeeded, but two tapes were inaudible and unusable: in one interview, the participant opened the window halfway through and traffic noise completely drowned the speech. In the other, the interviewee spoke extremely quietly and, although the tape recorder was close, it did not catch enough of his speech to be of use. Valuable lessons on interview and recording techniques were quickly learned.

When faced with analysing the vast amount of data, I was overwhelmed and unsure as to my ability to analyse it. I worried for many weeks but eventually woke up at about 3 o'clock one morning with a flash of inspiration about the process. Many days of pouring over transcripts had triggered memories of undertaking Advanced Level English at school. This had involved in-depth literary analysis of texts and poems, looking for hidden meanings and analysing the imagery in order to go beyond the written word and try to divine the author's (often hidden) concepts and meanings. This was a revelation and meant that I was able to proceed with less fear and trepidation and, as the analysis progressed, I realised that my initial inspiration was a valuable tool that had also been used and written about by other qualitative researchers (see for example Rose and Webb 1998).
As described earlier, later tapes were not transcribed fully. When listening to these tapes I found that I was able to immerse myself without worrying over the complete accuracy of the transcript. I was able to gain a sense of understanding of the 'bigger picture' more quickly. Poland (2003) warns that an obsession with verbatim transcription can mask aspects such as tone, non-verbal communication and expression and can detract from the interpretation of the conversation. Sandelowski (1993) also recommends that researchers look not only at what is said, but also at what is meant and how the interview itself was done. When reflecting on this stage of the analysis, I realised that not only was immersion easier when not attempting to transcribe concurrently, but also that my experience of analysing all the previous tapes had led to a far greater intuitive process for the analysis of those last few interviews.

Using the framework approach facilitated clear, transparent management of large amounts of data and also enabled data to be easily converted for both single-case and cross-case analyses. The main problem I found was the amount of time that compiling the spreadsheets actually took. I underestimated how long this would take and this caused a slight delay in completing the analysis. However, despite this I would use the approach again because of its flexibility, transparency and structured format, which I found helped me as a novice to qualitative analysis.

In conclusion, I had learned throughout the process not only the 'how to' techniques of qualitative and case study research, but also that total immersion in the data and 'hearing' what the data had to say were key. Using imagery, and going beyond the data, were the most important milestones for me. My initial
thoughts about similarities to literary analysis proved correct: a revelation that was the foundation for the rest of the analytical process. The more you listen, probe and explore, the more detail emerges. The 'art' that is qualitative analysis (Sandelowski 1993, Rose and Webb 1998) had finally become clear, in addition to the science.
CHAPTER 7. RESULTS

Results by trust
This section will provide a brief overview of trusts to outline trust profiles and analyse if the results indicated any noticeable differences between trusts that could be associated with the specific organisational model used to organise and support NR as outlined in the introduction. In order to achieve this overview by trust, information was obtained when working with individual trusts 'shadowing' key staff in informal observation, from documents such as R&D strategies and via in-depth interviews (which provided the greater part of the data). In order to provide a decision trail and rigour to findings, interview data were analysed using framework charts: each theme was charted by trust.

Organisational profiles

Practice development model
PDM was a large, well established teaching hospital trust providing local and regional services in a large regional city centre with a central trust board and a directorate structure. The trust consisted of nine hospitals with approximately 1,000 beds and had an annual budget exceeding £300 million pounds. It employed over 7,000 members of staff. PDM had a long tradition of medical research in areas such as cancer, neurology, dental sciences, ophthalmology, vascular disease, rheumatology and obstetrics, gynaecology and sexual health. It was allied to two separate HEIs: one provided medical education and training, and the other provided education and training for nurses and allied health professionals.
Within the trust, there was a large R&D department with a separate RDSU. External research funding amounted to over £12 million and NHS support funding was around £6.7 million pounds per annum. In one year alone there were over 450 peer-reviewed research publications. The R&D director was a pharmacist by background and NR was facilitated by a senior practice development nurse who was also Assistant Director of Nursing. The R&D department was large with several managers and lots of support staff: the large volume of medical research meant that administration processes for research governance were huge.

The trust had been part of an inquiry in the previous few years following on from problems in one area of practice that were heightened by overall organisational failure and the trust was therefore in the process of organisational renewal and regeneration. Since the inquiry a new director of nursing (DoN) and chief executive had been appointed and the organisation was seen by the DoN as being in the process of change. A process of shared governance was being introduced via councils, a structure whereby professional nurses are involved in the decision-making processes and control over professional practice is legitimised and authority extended (Robinson 1999).

*Nursing research coordinator model*

NRCM was a medium sized trust with two main hospitals and 850 beds, employing approximately 5,150 people. It was set in a city with an urban and rural mixed catchment area. It was also a teaching hospital trust: this was a new development. A new undergraduate medical school had opened in the year prior to the commencement of data collection. Before this, the trust had a very active postgraduate medical school allied to one university; nursing education was
provided by another HEI. The new medical school was a joint venture between both HEIs.

This trust also had a board and directorate structure. There was a R&D department and a separate RDSU within the trust. The R&D director in this trust was a senior medical consultant who was also a professor in the medical school. Main research areas were cancer, diabetes and molecular genetics. External research grant funding amounted to over £2 million, and NHS support funding was in the region of £800,000 per annum. In one year, there were 109 peer reviewed research papers published. Nursing research was facilitated by a nursing research coordinator who had two days per week allocated for this part of his role, the remainder of his time was spent in the education department within the trust.

*Joint appointment model*

JAM was a mental health partnership trust (a partnership between health and social care agencies) in a small, predominantly rural county. It was established as a pilot partnership trust in 1999 prior to this being more widely adopted across mental health trusts as recommended by government policy (DoH 1997a, DoH 1998c)

It was one of the first trusts in Britain to combine health and social care services in one organisation. Health and social care staff worked together in integrated locality teams (rather than in directorates) with the four localities matching the PCT boundaries to provide complete packages of care. Specialist services were provided on a county-wide basis. There was an overall trust management board. Services were available to all age groups with inpatient units, day
centres and community mental health teams covering all areas of the county; most clients were cared for at home.

The trust was small and shared RDSU facilities with a district general hospital in the county. The director of nursing was also the director of research, and held a joint appointment with the local HEI as a principal lecturer. He also facilitated nurses and AHPs undertaking research. There was no separate R&D department in the trust but R&D management was undertaken largely by the clinical governance manager. Towards the end of data collection a lead nurse for R&D was appointed to facilitate nursing research in the trust and report on research governance processes to another trust in the region, who were appointed sponsors to manage RG procedures. Programmes of organised research were not widespread due to the newness of the organisation; the director of nursing was in the process of assessing the organisation’s research capacity and strategy.

**Director of nursing model**

DNM was a district general hospital serving approximately 200,000 people with 600 beds and an annual budget of around £117 million. It had a tradition of research in certain key areas, notably biomedicine and genetics: genetics research had brought in about £1.3 million of external research funding. NHS support monies total around £400,000 annually. This hospital served a largely rural area with a small city at its hub. It had a board and directorate structure. Specialist services consisted of a regional burns and plastics unit and a dedicated spinal rehabilitation centre.

The trust was not large enough to support a separate RDSU but combined this function with the R&D department. The R&D director was a medical consultant
and there was an acting manager in the R&D department who was on a fixed-term contract covering for maternity leave.

Nursing research was supported by the DoN who had a keen interest in developing nursing research capacity and had worked in both management and education. She was in the process of setting up a clinical academic centre for healthcare improvement projects within the trust in conjunction with the local HEI. Due to ill-health she left the trust half way through the data collection period. The incoming DoN declined a meeting or interview about her plans for future nursing research, and was the only DoN who was not seen or interviewed as part of the study.

**Head of development model**

HDM was a teaching primary care trust (tPCT) that acquired teaching status whilst the study was in progress. The trust served one large industrialised city (population approximately 250,000) which had known pockets of deprivation and poverty and was a Health Action Zone (DoH 1997a). Mental health, learning disability and rehabilitation services were provided in addition to community care.

The trust had a Head of Development, Research and Education in post who had previously been the research and clinical governance manager in the organisation. She had a nursing background. The trust worked closely with the local HEI and had a research portfolio, which whilst small by comparison with the larger trusts, was larger than would be expected for a PCT due to some specialised medical and psychological research taking place. NHS research support funding was approximately £137,000 per annum for around 25 projects. The head of
development was in the process of devising a research strategy in conjunction with a research steering group consisting of members from management, practice and academic representation from the local HEI.

Teaching trust status meant that many changes were taking place educationally and with research and evidence-based practice activities in the trust. The RDSU support was shared with the local acute services trust in the same city and was based on the site of the acute trust. Another PCT provided RG sponsorship for all PCTs in the county.

**Findings of the analysis**

When analyses of observation, documents and interview data were performed by trust, clear patterns emerged that were related to the size and nature of the trust. The three larger trusts that were secondary care organisations (PDM, NRCM and DNM) all had similar structures and support systems in place, but with a few specific features also apparent in each trust. Figure 7.1 below demonstrates the similarities of these structures.

These three trusts had a directorate structure, and there were three directorates associated with nursing R&D support: the individual clinical directorates, the R&D/CE directorates and the nursing directorates, which all reported to the trust executive boards. The PDM trust was unique in having an R&D peer support group in each clinical directorate, which dealt with peer review of proposals, resource implications, immediate support for researchers and day to day project monitoring. Each support group consisted of a medical clinical director, a manager, an NHS researcher, an academic researcher and an independent
assessor. The R&D directorate was large and had several managers responsible for differing aspects of research and research governance, reflecting the volume of overall research carried out in this trust. The practice development nurse in the trust acted as a facilitator for nurses (and AHPs) who were undertaking, or thinking of undertaking, research, providing information and advice as to trust facilities available to support researchers and liaising with directorates about the financing of courses such as Master's programmes.

The DoN had set aside funds for Master's course fees; applications went both to clinical directorates for line manager's agreement, and to the PDN for agreement. The PDN also ran a research professionals' support group for supporting clinical trials research nurses which had been set up by the DoN to act as a communication channel for these practitioners who, prior to the setting up of this group, had been viewed as often isolated and outside of traditional trust structures by managers.
Clinical directorates

R&D peer support groups

Lead clinicians Research forums

R&D and/or CE directorate

R&D committee
R&D director
R&D manager
RG manager
RDSU

Nursing directorate

Practice development nurse

Research professionals group

Nursing research coordinator

Master's awards peer support group

Director of Nursing/Assistant DoN
Reader in CE (planned)

Key: White = practice development model, nursing research coordinator model and director of nursing model. Red = practice development model. Blue = nursing research coordinator model. Yellow = director of nursing model.

Key to abbreviations: R&D = research and development, CE = clinical effectiveness, RG = research governance, RDSU = research and development support unit, DoN = director of nursing

Figure 7.1 Organisational model of support for nurse researchers, secondary care trusts (practice development model, nursing research coordinator model, director of nursing model)
In NRCM a very similar facilitation role was undertaken by the nursing research coordinator to the practice development nurse in PDM, and the R&D directorate was fairly large with R&D/RG management separate from the RDSU. However, in this trust the research proposals were reviewed and monitored directly in this directorate, and clinical trials research nurses were monitored and supported by the R&D directorate. Nurse researchers who wanted individual support were allocated a lead clinician, usually a doctor but occasionally a nurse with a PhD, within the clinical directorates, but this was an informal arrangement rather than a trust policy. The nursing research coordinator had set up a peer support group for nursing Master’s students which he facilitated. Within clinical directorates there were research interest forums which were open to all disciplines; each had a nurse representative.

In DNM, nursing research facilitation came directly from the DoN or one of the two deputy DoNs. They would discuss support and agree funding with individual nurse researchers. Proposals were peer reviewed and approved directly by the R&D/CE directorate, as in NRCM trust. In this trust, however, the R&D directorate was smaller and was joint with clinical effectiveness management: the trust was smaller with a lower overall volume of research activity and the R&D manager was also the RDSU manager, combining both roles within the trust. CE administration was done by a second manager. The trust was endeavoring to increase research activity linked to evaluation of care and quality improvement/CE, and was working jointly with their HEI provider to set up a clinical academy – a joint appointment was planned for a reader in clinical effectiveness with the aim of introducing quality
improvement projects to improve evidence-based practice and clinical effectiveness and involve nurses and other clinical staff in these activities.

The remaining two trusts were far smaller, newer and were structured differently. One was a mental health partnership trust (JAM), the other a newly created tPCT (HDM). Figures 7.2 and 7.3 show the structure of these organisations.

In this trust, the R&D was linked to CE in one department. Facilitation and support for research came from the DoN who also was the trust's Director of Research,
and in addition held a joint appointment with the local HEI as a principal lecturer. He frequently supervised individual projects, with a joint responsibility as a supervising clinician and as an academic supervisor. Also in post was a lead nurse, research and development in the R&D/CE department; this was a newly created post to share some of the research workload, such as internal trust monitoring and reviewing proposals, with the DoN. Research proposals were reviewed by the lead nurse but the DoN gave final approval and agreed funding for courses such as Master's programmes if nursing staff had agreement from line managers to attend. As Director of Research, the DoN was also responsible for research overall in the trust and was planning to develop a R&D strategy for the trust, which at the time of data collection was not in existence. The trust was in the process of negotiating RG sponsorship with another trust, which later became responsible for RG for all MHPTs in the area. Nurses wanting research advice also had access to an RDSU department in a secondary care trust in the county town, but had to travel to that trust to access advice. Within the department there was also a CE manager and a CE group which met regularly to review evidence and published research and make recommendations for practice. Annual conferences were arranged by the trust for practitioners to publicise and present ongoing or completed research, educational projects and CE activities.

The HDM, a primary care trust, was a new organisation that had developed from a primary care group and recently been awarded the status of teaching PCT. Nursing and other research was in the remit of the head of development: research and education. The postholder was a qualified nurse who had previously been the R&D/clinical governance manager for the PCG.
The structure in the trust is shown in Figure 7.3 below. Some structural similarities can be seen to JAM but the role of the executive nurse in this trust was far less, with research facilitation, funding for Master’s course fees (agreed after nurses had permission from line managers to attend) and research monitoring and management being provided by the head of development. Research supervision and support was frequently provided by the RDSU, located in the same city but off-site at the secondary care trust. Officials from the RDSU were used to acting as joint supervisors, in collaboration with the local HEI, for some Master’s students in addition to providing general research advice, education and support. Research proposals were reviewed and approved by the head of development in conjunction with the research steering committee, which had developed the trust R&D strategy and consisted of representatives from management, clinical practice (mostly NHS medical staff, GPs and clinical psychologists), the RDSU and the local HEI. Research governance management was undertaken off-site by a separate research management and governance PCT which managed RG for all primary care trusts across two strategic health authorities.
Figure 7.3 Organisational model of support for nurse researchers, head of development model

Analysis by trust

When detailed analysis of the interview data (the bulk of the data collected) was undertaken and the framework charts were compiled by trust, it quickly became apparent that the same themes were shared for all organisations. All trusts shared these common themes, with no one organisation having a particular theme that
was unique to that organisation. As the analysis progressed, it became apparent that there were some differences between specific groups of staff: two themes were common to all groups of staff, two were shared by some or all of the groups, and two were unique to individual groups. In view of this, as the analysis proceeded, analysis of themes was further developed by looking at groups, rather than by trust, and will be reported in detail below. The implications of this finding will be discussed further in Chapter 8.

**Summary of results by trust**

The organisational models of research support seemed to be linked to the size and nature of the trust. In view of the commonality of themes that emerged between trusts from interview data, further analysis was then undertaken and results by theme will now be reported.

**Results by theme**

In this section, results will be presented by theme. Data were further analysed by group as well as by trust, as outlined in the methods chapter and above. Four main groups of staff were interviewed: nurse consultants (n=10), other nurses undertaking research (n=38), the lead nurse in the trust and/or their deputy (n=7) and R&D directors, managers and/or facilitators (n=10). Tables 7. 1 to 7. 4 show the designation of the participants' posts and the setting in which they worked.
<table>
<thead>
<tr>
<th>Designation</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nurse consultant, critical care</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>2. Nurse consultant, paediatric intensive care</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>3. Nurse consultant, cardiology</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>4. Nurse consultant, care of older people</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>5. Nurse consultant, cancer care</td>
<td>Teaching hospital 1 (in partnership with 18 other NHS hospital trusts and PCTs) - PDM</td>
</tr>
<tr>
<td>6. Nurse consultant, stroke coordination, primary care</td>
<td>Teaching hospital 2 (in partnership with three local PCTs) - NRCM</td>
</tr>
<tr>
<td>7. Nurse consultant, accident and emergency mental health liaison 1</td>
<td>Mental health partnership trust - JAM</td>
</tr>
<tr>
<td>8. Nurse consultant, psychological therapies</td>
<td>Mental health partnership trust - JAM</td>
</tr>
<tr>
<td>9. Nurse consultant, accident and emergency mental health liaison 2</td>
<td>Mental health partnership trust - JAM</td>
</tr>
<tr>
<td>10. Nurse consultant dermatology</td>
<td>District general hospital - DNM</td>
</tr>
</tbody>
</table>

Key to abbreviations: PDM = practice development model, NHS = National Health Service, PCTs = primary care trusts, NRCM = nursing research coordinator model, JAM = joint appointment model, DNM = director of nursing model

Table 7.1 Designation of nurse consultants and employing trusts
<table>
<thead>
<tr>
<th>Designation</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Paediatric research nurse for parental satisfaction nursing study</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>2. Researcher-practitioner, eye hospital</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>3. PhD student (Full time student at local HEI doing research in the trust on an honorary contract)</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>4. Clinical education facilitator (has PhD)</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>5. Staff nurse, eye hospital</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>6. Lecturer-practitioner, accident and emergency</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>7. Clinical nurse manager, haematology and oncology</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>8. Ward manager, haematology</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>9. Senior nurse, cardiothoracics</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>10. Senior lecturer / clinical nurse specialist, rheumatology</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>11. Senior research nurse manager / facilitator, vascular studies</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>12. Research nurse, paediatric oncology</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>13. Nurse specialist, paediatric diabetes</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>14. Post-doctoral research fellow</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>15. Clinical nurse manager/ lead cancer nurse, haematology/ oncology</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>16. Research nurse (G grade), solid tumours</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>17. Research nurse (G grade), haematology</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>18. Clinical nurse specialist. pain management</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>19. Senior nurse, older people (modern matron)</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>20. Health advisor in genito-urinary medicine (previously clinical nurse manager)</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>21. Funded PhD student</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>22. Staff nurse, rehabilitation unit</td>
<td>Mental health partnership trust - JAM</td>
</tr>
<tr>
<td>23. Community psychiatric nurse</td>
<td>Mental health partnership trust - JAM</td>
</tr>
<tr>
<td>24. Team manager for two community mental health teams</td>
<td>Mental health partnership trust - JAM</td>
</tr>
<tr>
<td>25. Primary care mental health development worker</td>
<td>Mental health partnership trust - JAM</td>
</tr>
<tr>
<td>26. Workforce development manager</td>
<td>Mental health partnership trust - JAM</td>
</tr>
<tr>
<td>27. Directorate senior nurse</td>
<td>District general hospital - DNM</td>
</tr>
<tr>
<td>28. Senior nurse/ lecturer-practitioner, pain control</td>
<td>District general hospital - DNM</td>
</tr>
<tr>
<td>29. Lecturer-practitioner, neonatal intensive care unit</td>
<td>District general hospital - DNM</td>
</tr>
<tr>
<td>30. Clinical risk manager</td>
<td>District general hospital - DNM</td>
</tr>
<tr>
<td>31. Patient advice and liaison service manager</td>
<td>District general hospital - DNM</td>
</tr>
<tr>
<td>32. Lecturer-practitioner, spinal unit</td>
<td>District general hospital - DNM</td>
</tr>
<tr>
<td>33. District nurse/ specialist practice mentor</td>
<td>Teaching primary care trust - HDM</td>
</tr>
<tr>
<td>34. Health visitor, ‘Sure Start’ programme</td>
<td>Teaching primary care trust - HDM</td>
</tr>
</tbody>
</table>

Table 7.2 Designation of nurse researchers and employing trusts
35. Health visitor, board member (lead for health visitors and nurses on clinical executive committee)  
Teaching primary care trust - HDM

36. Community psychiatric nurse  
Teaching primary care trust - HDM

37. Manager/clinical nurse specialist, community forensic team, and PCT lead, child protection (mental health)  
Teaching primary care trust - HDM

38. Training development coordinator  
Teaching primary care trust - HDM

Key to abbreviations: PDM = practice development model, PhD = Doctor of Philosophy, HEI = higher education institution, NHS = National Health Service, PCT(s) = primary care trust(s), NRCM = nursing research coordinator model, JAM = joint appointment model, DNM = director of nursing model, HDM = head of development model

Table 7.2 (cont.) Designation of nurse researchers and employing trusts

<table>
<thead>
<tr>
<th>Designation</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Director of nursing</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>2. Acting director of nursing</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>3. Acting head of midwifery</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>4. Director of nursing</td>
<td>Mental health partnership trust - JAM</td>
</tr>
<tr>
<td>5. Assistant director of nursing</td>
<td>District general hospital - DNM</td>
</tr>
<tr>
<td>6. Teaching primary care trust executive nurse</td>
<td>Teaching primary care trust - HDM</td>
</tr>
<tr>
<td>7. Director of mental health and learning disability nursing</td>
<td>Teaching primary care trust - HDM</td>
</tr>
</tbody>
</table>

Key to abbreviations: PDM = practice development model, NRCM = nursing research coordinator model, JAM = joint appointment model, DNM = director of nursing model, HDM = head of development model

Table 7.3 Designation of lead nurses and employing trusts

<table>
<thead>
<tr>
<th>Designation</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Director of research and clinical effectiveness</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>2 Research governance manager</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>3. Research and development manager</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>4. Practice development nurse/ nursing research facilitator</td>
<td>Teaching hospital 1 - PDM</td>
</tr>
<tr>
<td>5. Research and development manager</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>6. Nursing research coordinator</td>
<td>Teaching hospital 2 - NRCM</td>
</tr>
<tr>
<td>7. Research and development lead</td>
<td>Mental health partnership trust - JAM</td>
</tr>
<tr>
<td>8. Director of research and development</td>
<td>District general hospital - DNM</td>
</tr>
<tr>
<td>9. Research and development/ research and development support unit acting manager</td>
<td>District general hospital - DNM</td>
</tr>
<tr>
<td>10. Head of development: research and education</td>
<td>Teaching primary care trust - HDM</td>
</tr>
</tbody>
</table>

Key to abbreviations: PDM = practice development model, NRCM = nursing research coordinator model, JAM = joint appointment model, DNM = director of nursing model, HDM = head of development model

Table 7.4 Designation of research and development managers
At the start of analysis it was not known whether or not themes would be in common or completely different between the four groups so the analysis was undertaken separately. The thematic frameworks from the original analysis can be seen in Tables 7, 5 to 7, 8 below. Once major themes had been identified, categories within each theme were established; these were then broken down into specific dimensions, as demonstrated below.
<table>
<thead>
<tr>
<th>Theme</th>
<th>Category</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions of nursing research</td>
<td>Traditions</td>
<td>Poor knowledge base</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low standards of rigour</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Medical power base/methods biases in NHS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not clinically based/jargonistic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Linked to awards</td>
</tr>
<tr>
<td>Culture</td>
<td></td>
<td>Nurses not research-aware</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nursing research not needed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fear of research</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guilt / reluctance to spend time on research</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organisational culture / barriers to NR</td>
</tr>
<tr>
<td>Processes</td>
<td></td>
<td>Research ethics committees/research governance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Funding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Time</td>
</tr>
<tr>
<td>Opportunities</td>
<td></td>
<td>Limited opportunities but there if looked for</td>
</tr>
<tr>
<td>NHS influences</td>
<td>Policy</td>
<td>Rationale for post</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NHS modernisation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trust policies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Legislation</td>
</tr>
<tr>
<td>Power base of NHS</td>
<td></td>
<td>Traditions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trade-offs</td>
</tr>
<tr>
<td>Support systems</td>
<td>Networks</td>
<td>Internal trust networks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Higher education institutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nurse consultant forum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others</td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>Support provided for others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support received from others</td>
</tr>
<tr>
<td></td>
<td>Relationships</td>
<td>Perceptions of others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Working relationships - nurses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- doctors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- managers</td>
</tr>
<tr>
<td>Individual influences</td>
<td>Attributes</td>
<td>Background of the individual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Master's degree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Expert practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leadership</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Empowerment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Challenger of status quo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Determination</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self confidence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Collaboration</td>
</tr>
<tr>
<td></td>
<td>Motivation</td>
<td>Personal agendas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Desire for change</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Career progression</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kudos of post</td>
</tr>
<tr>
<td>Role Achievement</td>
<td>Role development</td>
<td>Four domains - integration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- non-integration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strategic role</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Models of working</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evolution of role</td>
</tr>
<tr>
<td></td>
<td>Concerns</td>
<td>Excessive workload</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ability to achieve expectations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inferior or unequal to doctors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of control over post's direction</td>
</tr>
</tbody>
</table>

Key to abbreviations: NHS = National Health Service

**Table 7.5 Thematic framework for nurse consultants**
<table>
<thead>
<tr>
<th>Theme</th>
<th>Category</th>
<th>Dimension</th>
</tr>
</thead>
</table>
| Perceptions of nursing research | Profile  | Low profile  
Not well regarded  
Small volume  
Under-developed  
Qualitative research seen as unscientific by others |
|                               | Traditions | Rare for clinical nurses to do research  
Done by academics  
Nurse involvement - usually as data collectors for others |
|                               | Culture   | Nurses:  
- don't do research  
- don't understand research  
- are frightened by research  
- good nurses are hands-on Research is not needed |
|                               | Opportunities | Funded Master's programmes now more widely available but places often have to be fought for and justified. Time - negotiated, often none available. Funding - difficult to get for nursing projects Many interviewees doing Master's programmes were in senior nursing or management positions |
|                               | Dissemination | Poor record of dissemination by nurses |
| NHS influences                | Research ethics policies | Ethics committees -  
Difficult  
Time delays  
Bias over methods used  
Meet infrequently  
Duplication with research governance |
|                               | NHS modernisation | Research governance framework  
Timescale inappropriate for small projects esp. Master's  
User participation  
New nursing roles  
Audit and evaluation  
EBP and CE |
|                               | Power base of NHS | Traditions - medical domination of nursing  
Trade offs/ manipulation |
| Support systems               | Networks  | Peer groups |
|                               | Support   | Support received from others -  
HEI  
Trust - R&D/RDSU depts.  
Family  
Support provided to others |
|                               | Relationships | Perceptions of others -  
Colleagues  
Medical staff  
Line managers |
| Individual influences         | Motivation | Part of award  
Part of job  
Career progression esp. to NC  
Own interest  
A need to prove they can do it  
Evaluation of practice  
Desire for change  
Likes autonomy  
Needed to achieve Master's awards and do dissertations  
Extent of this under-appreciated by NHS, colleagues, HEIs |
Key to abbreviations: EBP = evidence-based practice, CE = clinical effectiveness, HEI = higher education institution, R&D = research and development, RDSU = research and development support unit, NC = nurse consultant, NHS = National Health Service

Table 7.6 Thematic framework for nurses undertaking research

<table>
<thead>
<tr>
<th>Theme</th>
<th>Category</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions of nursing research</td>
<td>Profile</td>
<td>Volume</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Views of nursing research</td>
</tr>
<tr>
<td></td>
<td>Processes</td>
<td>Opportunities</td>
</tr>
<tr>
<td></td>
<td>Culture</td>
<td>Research for and in practice</td>
</tr>
<tr>
<td></td>
<td>Traditions</td>
<td>Culture – of nurses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- of organisation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Traditions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Power base</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Barriers</td>
</tr>
<tr>
<td>NHS Influences</td>
<td>Policy</td>
<td>NHS modernisation agenda</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trust policies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Legislation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multiprofessional working</td>
</tr>
<tr>
<td>Support systems</td>
<td>Networks</td>
<td>Higher education institutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Workforce development confederation</td>
</tr>
<tr>
<td></td>
<td>Support for staff</td>
<td>Management support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R&amp;D department / RDSU</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clinical governance/ audit teams</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Others</td>
</tr>
<tr>
<td>Individual influences</td>
<td>Motivation</td>
<td>Evaluation of current practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Desire for change in practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Professionalisation of nursing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Development of research-active nurses</td>
</tr>
</tbody>
</table>

Key to abbreviations: NHS = National Health Service, RDSU = research and development support unit.

Table 7.7 Thematic framework for lead trust nurses
<table>
<thead>
<tr>
<th>Theme</th>
<th>Category</th>
<th>Dimension</th>
</tr>
</thead>
</table>
| Perceptions of nursing research | Profile | Low profile  
Not well regarded  
Needs local champions  
Nurses need to be assertive  
Cultural shift needed  
NCs key in developing nursing research  
Very little done overall  
Linked to awards |
| | Volume | More in large, traditionally research-orientated trusts  
Lack of mentors with NR experience |
| | Support | Line managers often unsupportive  
Time and resources difficult  
Nurse research coordinators more involved with EBP/CE, act as a conduit to refer on. |
| | Clinical Trials nurses | Under-developed  
Under-utilised  
Difficult to monitor activities  
Existence not always known of.  
Not always aware of RG regs  
Losing trusts money within SFS budget if not known of  
Many unsupported  
Research professionals group can be set up to give support and monitor them. |
| NHS influences | Research governance policy | Has imposed structure  
Monitoring huge but effective  
Ad hoc prior to RG  
Doctors used to 'doing their own thing' with no monitoring  
Power base  
Arrogance  
RG not seen as relevant  
Challenging to deal with this  
Small projects under threat |
| | NHS modernisation | Evaluation/ SDO research agenda but more needed  
Methods biases  
EBP/CE seen as more important  
Career researchers will evolve in future  
Large trusts penalized with R&D funding  
Period of transition  
User participation |
| Partnerships | Higher education institutions | Different priorities to NHS  
Standardised approach needed e.g. for monitoring  
More liaison and joint working needed  
Don’t appreciate part-time students’ needs and difficulties |
| | Multiprofessional working | Needed – the way forward  
Is a myth at present  
Doctors:  
Don’t share good practice  
Refuse multiprofessional study days  
Isolationist  
Communication poor between professions  
Nursing research on its own will be difficult |
| | Others | Trusts should be innovative and tap into other organisations for resources e.g. WDC / Learning Skills Council / charitable trusts / independent charities |

Key to abbreviations: NCs = nurse consultants, NR = nursing research, EBP = evidence-based practice, CE = clinical effectiveness, RG = research governance, SFS = support for science, SDO = service delivery and organisation, NHS = National Health Service, WDC = workforce development confederation

Table 7.8 Thematic framework for research managers
Once the themes from all groups had been identified it could be clearly seen that there was considerable overlap between groups; two themes were common to all four groups, perceptions of nursing research and NHS influences. Two themes were common to several, support systems and individual influences. Only two themes (partnerships, roles) were identified for individual groups only (see Figure 7.4, thematic overlap between groups).

![Thematic overlap between groups](image)

**Figure 7.4 Thematic overlap between groups**

This commonality led to a revised overall thematic framework (see Table 7.9) for all groups.
<table>
<thead>
<tr>
<th>Theme</th>
<th>Category</th>
<th>Dimension</th>
</tr>
</thead>
</table>
| Perceptions of nursing research | Profile  | Low profile
Not well regarded/ Low standards of rigour
Jargonistic
Under-developed, small evidence-base
More in large, traditionally research-orientated trusts
Lack of mentors with NR experience
Qualitative research seen as unscientific by other HCPs
Few local champions |
|                            | Traditions | Medical research power base
NR not clinically based
Linked to awards
Rare for clinical nurses to do research
Done by academics in HEIs
Nurse involvement - usually as data collectors for others |
|                            | Culture    | Nurses:
- don't do research
- don't understand research
- are frightened by research
- good nurses are hands-on
Fear of research
Guilt / reluctance to spend time on research
Organisational culture / barriers to NR
Lack of assertiveness
Cultural shift needed |
|                            | Processes  | Application process for courses
Funding
Time
Nurse research coordinators more involved with EBP/CE and act as a conduit to refer on. |
|                            | Opportunities | Funded Master's programmes more widely available but places have to be fought for and justified
Opportunity linked to seniority
Limited NR opportunities (but there if actively sought)
NCs key in developing NR
Research for and in practice |
|                            | Dissemination | Poor record of dissemination by nurses |
|                            | Clinical Trials nurses | Under-developed
Under-utilised
Difficult to monitor activities
Existence not always known of.
Not always aware of RG regs
Losing trusts money within SFS budget if not known of
Many unsupported
Research professionals group can be set up to give support and monitor them. |

Table 7.9 Revised thematic framework for all groups
<table>
<thead>
<tr>
<th>NHS Influences</th>
<th>Modernisation policies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trust policies</td>
</tr>
<tr>
<td></td>
<td>Legislation</td>
</tr>
<tr>
<td></td>
<td>Multiprofessional working</td>
</tr>
<tr>
<td></td>
<td>New nursing roles</td>
</tr>
<tr>
<td></td>
<td>Audit</td>
</tr>
<tr>
<td></td>
<td>EBP and CE seen as more important than primary research</td>
</tr>
<tr>
<td></td>
<td>Evaluation/ SDO research agenda - more needed Career researchers will evolve in future</td>
</tr>
<tr>
<td></td>
<td>Large trusts penalized with R&amp;D funding</td>
</tr>
<tr>
<td></td>
<td>Period of transition</td>
</tr>
<tr>
<td></td>
<td>User participation</td>
</tr>
<tr>
<td>Power base of NHS</td>
<td>Traditions -- medical power base</td>
</tr>
<tr>
<td></td>
<td>Evaluation/ SDO research not regarded as ‘real research’ by doctors</td>
</tr>
<tr>
<td></td>
<td>Trade-offs</td>
</tr>
<tr>
<td>Research governance framework</td>
<td>Ethics committees --</td>
</tr>
<tr>
<td></td>
<td>- Difficult</td>
</tr>
<tr>
<td></td>
<td>- Time delays</td>
</tr>
<tr>
<td></td>
<td>- Bias over methods</td>
</tr>
<tr>
<td></td>
<td>- Meet infrequently</td>
</tr>
<tr>
<td></td>
<td>- Duplication with RG</td>
</tr>
<tr>
<td></td>
<td>- Timescale inappropriate for small projects</td>
</tr>
<tr>
<td></td>
<td>- Small projects threatened</td>
</tr>
<tr>
<td>Implementation:</td>
<td>Implementation:</td>
</tr>
<tr>
<td></td>
<td>- RG has imposed structure</td>
</tr>
<tr>
<td></td>
<td>- Monitoring huge, effective</td>
</tr>
<tr>
<td></td>
<td>- Ad hoc prior to RG</td>
</tr>
<tr>
<td></td>
<td>Attitudes of doctors:</td>
</tr>
<tr>
<td></td>
<td>- RG not seen as relevant</td>
</tr>
<tr>
<td></td>
<td>- Challenges of this</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Support systems</th>
<th>Networks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal trust networks</td>
</tr>
<tr>
<td></td>
<td>Nurse consultant forums/ external networks</td>
</tr>
<tr>
<td></td>
<td>Peer groups</td>
</tr>
<tr>
<td></td>
<td>Workforce development confederation</td>
</tr>
<tr>
<td></td>
<td>Others</td>
</tr>
<tr>
<td></td>
<td>HEIs</td>
</tr>
<tr>
<td>Support</td>
<td>Support provided for nurse researchers</td>
</tr>
<tr>
<td></td>
<td>- HEIs</td>
</tr>
<tr>
<td></td>
<td>- Trust – R&amp;D/RDSU depts.</td>
</tr>
<tr>
<td></td>
<td>Libraries. Lead nurse/NCs/ CG/Audit teams</td>
</tr>
<tr>
<td></td>
<td>- Other e.g. family</td>
</tr>
<tr>
<td></td>
<td>Support provided by nurse researchers to others</td>
</tr>
<tr>
<td>Relationships</td>
<td>Perceptions of others</td>
</tr>
<tr>
<td></td>
<td>- Nurse colleagues</td>
</tr>
<tr>
<td></td>
<td>- Medical staff</td>
</tr>
<tr>
<td></td>
<td>- Line managers</td>
</tr>
<tr>
<td></td>
<td>Working relationships</td>
</tr>
<tr>
<td></td>
<td>- Nurse colleagues</td>
</tr>
<tr>
<td></td>
<td>- Medical staff</td>
</tr>
<tr>
<td></td>
<td>- Managers</td>
</tr>
</tbody>
</table>

Table 7.9 (cont.) Revised thematic framework for all groups
Individual Influences

Motivation

- Job-related motivation e.g.
  - Desire for change
  - Evaluation of practice
  - Part of job
- Personal motivations e.g.
  - Career progression
  - Kudos
  - Part of award
  - Career progression (to NC)
  - Own interest
  - A need to prove they can do it
  - Autonomy
  - Next logical step
- Professional motivations e.g.
  - Professionalisation of nursing
  - Empowerment
  - Development of research-active nurses

Attributes of nurse researchers
(specifically NCs)

- Background of the individual
- Master's degree
- Expert practice
- Leadership
- Challenger of status quo
- Determination
- Self confidence
- Collaboration

Personal sacrifices

- Needed to achieve Master's awards and do dissertations
- Extent of this under-appreciated by NHS, colleagues, HEIs

Role achievement

Role development

- Four domains - integration
- Non-integration
- Strategic role
- Models of working
- Evolution of role

Concerns

- Excessive workload
- Ability to achieve expectations
- Inferior or unequal to doctors
- Lack of control over post's direction

Partnerships

HEIs

- Different priorities to NHS
- Standardised approach needed e.g. for monitoring
- More liaison and joint working needed
- 'Don't appreciate part time students' needs and difficulties

- Needed - the way forward
- Is a myth at present
- Doctors:
  - Don't share good practice
  - Refuse shared study days
  - Isolationist
- Communication poor between professions
- Nursing research on its own will be difficult

- Multiprofessional working

- Others

- Trusts should be innovative and tap into other organisations for resources e.g. WDC/Learning Skills Council/charitable trusts/independent charities

Key to abbreviations: NR = nursing research, HCPs = health care professionals, HEIs = higher education institutions, EBP = evidence-based practice, CE = clinical effectiveness, NCs = nurse consultants, RG = research governance, SFS = support for science, NHS = National Health Service, SDO = service delivery and organisation, R&D = research and development, WDC = workforce development confederation, RDSU = research and development support unit, CG = clinical governance

Table 7.9 (cont.) Revised thematic framework for all groups
In light of these findings, results will be presented by theme and differences between groups highlighted as part of this process. There was some overlap within themes, for example the issue of the medical power base was apparent in both perceptions of nursing research and NHS influences, or the role of HEIs; this is reflected in the presentation of the results.

**Perceptions of nursing research**

This was a core theme to all four groups. Seven main categories were identified in this which were: *profile, traditions, culture, processes, opportunities, dissemination* and *clinical trials nurses*.

**Profile**

The dimensions in this category were numerous: the perceived low profile of NR, the fact that it was *not well regarded* with low standards of rigour, the use of *jargonistic language* in research reports, with research being *under-developed* and having a *small evidence-base*. The volume of NR was seen to be *more in large, traditionally research-orientated trusts*, while qualitative research was *seen as unscientific* by other HCPs. A lack of mentors with NR experience was identified and NR was seen to have *few local champions*. These dimensions will now be explored in more depth.

The perceived low profile of NR was echoed by several groups. A LP in the spinal unit in DNM stated of NR in her trust:

>'There’s bits going on, but you don’t really know what’s happening'.

The practice development nurse who facilitates NR in the PDM commented on the low profile but stated this did not represent the actual picture:
'You can usually sit back and think, "Well, we're doing nothing for nursing research", but when we look at how it fits and slots in with multiprofessional systems that we've got in place, then we're doing quite a lot to promote it.'

The director of research in this trust also commented on the problems caused by the differing nature of NR and the fact that it is not well regarded:

'I think, trying to get people to understand the value of work which does not follow the pattern that they're used to seeing.'

She also commented, on nurses trying to gain support for projects:

'They know that if they go to the professor of medicine in that directorate, they're not going to get much of a hearing...'

The director of nursing in this same trust also agreed. She stated NR was 'undervalued and under-developed..., and still has a long way to go.'

Several nurse consultants (NCs) also perceived there were historically low standards of rigour in nursing research studies; one commented:

'I personally feel nursing, um, research hasn't always been done properly, hasn't been, um, particularly well researched.'

The use of jargonistic language for NR reports was commented on. The executive nurse in HDM thought the language needed 'demystifying' whilst one NC in care of the older person said:

'I downloaded an article... the title of it is, "Understanding and interpreting older people's voices: a period of practice using gerontal transcendent" and I think, "I'm a nurse consultant and I don't understand the title".'

The fact that NR is under-developed with a small evidence base was highlighted by several groups. For example, the acting Head of Midwifery in NRCM stated:

'I think we're just getting started.'
Several nurse consultants agreed: one, a NC in cardiology in PDM described NR as ‘embryonic’ and ‘way behind’. The director of nursing in JAM stated:

‘Our knowledge base in mental health is pretty barren.’

The R&D manager in DNM knew of very few NR projects ongoing in the trust:

‘I would say that there is probably about six projects that I am aware of... it’s healthy, but it is still at a very low level.’

Output of NR was generally seen by some groups as greater in the large, traditionally research orientated trusts, notably established teaching hospitals where there was more of a general tradition of research activity. The Director of Nursing in JAM had previously worked in a large London specialist trust:

‘I came from an organisation where, you know, if it moved it was researched.’

The R&D manager in PDM also commented:

‘We have a lot of academic links... for smaller hospitals it’s much more difficult, they cannot have those same collaborative links.’

Several comments were made about NR being seen as unscientific by other HCPs, especially medical staff; the lecturer practitioner in A&E in PDM, stated:

‘Because it’s qualitative … and not a randomised controlled trial, then the medics see it as second class research.’

A haematology ward manager doing research in PDM stated how she had fielded comments such as:

‘“How can you analyse that? It’s got no numbers”.’

from medics. In PDM, the director of research spoke of the necessity for, and problems of, ring-fencing money for non medical research and how the trustee’s
charitable research funding streams had been split into two: medical and non-medical research:

'It also allows people to point the finger and say, “Well, the reason they’ve got to ring-fence the money, is because the research is poor quality and it wouldn’t get funded anywhere else”.'

Several groups identified a lack of mentors with NR experience, although others felt that mentors were there but not identified; the practice development nurse in PDM commented:

'I think we’ve got a huge untapped resource out there.'

The R&D lead in JAM was looking to develop more mentors:

'What I would like to do, is have some sort of mentorship scheme, anyway, and use those nurses and some of the other more senior, you know, those with the experience, and those who have got the academic qualifications, and have a sort of pool of people.'

Finally in this category, groups identified there were few local champions available to push the NR agenda forward: the director of R&D in DNM emphasised this point:

'Nursing research needs a champion, I think, for a start, and I’m not clear who that would be at the moment… It needs somebody to speak up for it… And that’s a nurse who is research orientated…'

Traditions

Dimensions of this category were the medical research power base, the perceptions that nursing research is not clinically based and is often linked to awards, with it being rare for clinical nurses to do research. NR was seen as being done by academics in HEIs and with nurse involvement usually as data collectors for others.

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The medical research power base was mentioned by several groups. One HV researcher in HDM said of the NHS R&D support systems:

'They've been more medically motivated than nursing motivated... It seems like a poor relation.'

A researcher-practitioner from PDM talked of how NR proposals had to be seen by medical staff:

‘Nursing research is under-valued, to the extent that medics look over any proposed nursing research in the trust.’

A NC in critical care in the same trust felt that her trust still adopted 'the old boy network' and felt nurses were under-valued:

‘Do you want to find out how nurses are valued? Then you go into the coffee room and the library. And you will find that medicine always has fabulous library access and they’ll have huge rooms in which to sit. Nurses are to drink coffee - where?... Why do they have to go off the unit?’

She perceived the ways doctors worked to be abusive:

‘It’s about power, it’s about control and it’s abuse, because it abuses the patients, it abuses nursing services, it abuses the institution.’

The acting director of nursing in NRCM stated:

‘Nurses have always engaged with doctors and participated in their research, but their names don't show on the paper... People need to get away from a medical model.’

whilst the head of development in HDM talked of the unfairness of the system:

‘GP’s are asking for, for 400 quid, if they want to go to a conference to present their paper, you know? And nurses are saying to me: “I have got a paper accepted, I wonder if there is any way?”’, you know, “I will pay my own train fare, but...”.

Many thought that nursing research is not clinically based and that it was rare for clinical nurses to do research. The senior nurse/lecturer-practitioner in DNM doing research stated: ‘Clinical nurses don't do research very much.’ This was seen as being for a variety of reasons; for example the training development
coordinator in HDM who was doing research stated it was due to the administrative processes such as ethical approval being 'off-putting' for nurses in the clinical setting who were 'clearly put off.' Time was also seen as a reason: a LP in DNM said:

"In my job description, research, or conducting research, isn't in there because time doesn't allow that.... I would love to do something but I don't really have the opportunity... You can't pack any more in..., you just can't do everything.'

Another nurse, the patient advisory and liaison support (PALS) manager in this trust stated:

"I think there are areas where it's easy, easier to have time to do research... I think it would be very hard for some ward staff to be able to actually do this... It's harder for the up-against-it wards.'

Even some of the NCs, who are expected to undertake research as part of their role, had difficulty in undertaking primary research. Four NCs were actively involved in primary research that was not linked to an award; one of these was also doing other research for her PhD. Two were doing research as part of their Master’s degree. All NCs except one were able to identify possible research opportunities, but four were not, at the time of interview, research active: one MH liaison NC was noticeably reluctant to undertake any and had not done any in the past, recognising it as her weakest area; when asked if research was an area she wanted to expand and develop she replied:

'Probably not, no. Probably not something that I've found comes easily to me, but I think that's experience and not having the time, really, to get involved in it.'

Table 7.10 shows the research activity of NCs.
| Nurse consultant 1 (Critical care PDM) | Yes | N/A | Yes |
| Nurse consultant 2 (Paediatric ICU PDM) | Yes | N/A | Yes |
| Nurse consultant 3 (Cardiology PDM) | Yes | N/A | Yes |
| Nurse consultant 4 (Dermatology DNM) | Yes | Yes-PhD | Yes |
| Nurse consultant 5 (Psychological therapies JAM) | No | Yes-Master's | No |
| Nurse consultant 6 (A&E MH liaison JAM) | No | No | No |
| Nurse consultant 7 (Care of the older person PDM) | No | N/A | Yes |
| Nurse consultant 8 (Stroke coordination NRCM) | No | N/A | Occasional only |
| Nurse consultant 9 (Cancer care PDM) | No | Yes-Master's | No |
| Nurse consultant 10 (A&E MH liaison 2 JAM) | No | No (waiting to complete Master's) | No |

Key to abbreviations: N/A = not applicable, PDM = practice development model, ICU = intensive care unit, DNM = director of nursing model, PhD = Doctor of Philosophy, JAM = joint appointment model, A&E = accident and emergency, MH = mental health, NRCM = nursing research coordinator model

Table 7.10 Research activity of nurse consultants

Many saw NR as linked to awards especially Master’s programmes. A NC in psychological therapies in JAM stated:

'The only research being undertaken, is by people who are, like myself, perhaps doing a, a degree of one sort or another.'

The R&D lead in JAM linked all the NR in the trust to awards, saying that all nursing research:

'... is as part of the Master’s exclusively at the moment.'

Similarly the Assistant DoN in DNM said:

'People are just doing it as part of a course or a project, and they are not doing it in terms of patient services.'
The figures in the present study echo these perceptions: of the 38 nurses interviewed who were undertaking research, 25 were doing it as part of an award. Mostly these were for Master's programmes.

There was a perception that most NR is done by academics in HEIs. The senior vascular research nurse in PDM stated:

’On the pure nursing research side, my guess would be their career pathway would be going to higher education. Or you know, working with higher education full time.’

A cardiology NC in the same trust felt that NR should be brought out of the ‘ivory tower’ of universities. A nurse researcher in DNM, a senior nurse/LP in pain control stated:

’The perception is that clinical nurses don’t do research, academics do.’

However, some of the research managers felt that this was slowly changing, especially with the advent of staff such as NCs and joint appointments with HEIs. The R&D manager in PDM commented on joint NHS/academic appointments:

’We’ve got people like (n), down in the rheumatology department, who has a nursing background and has gained her PhD, and actually has a lectureship… so she’s an academic nurse, who’s very much filling her own funding and pursuing her own research agenda.’

PDM was involved with the development of staff with the local HEI, with four types of posts emerging, mostly joint appointments between the HEI and trust: lecturer-practitioner (LP), lecturer, lecturer-manager and researcher-practitioner (RP). One nurse researcher was in a RP post. She had previously been a LP in the trust and when this contract expired, the HEI changed it to RP: whilst a LP she had undertaken much research and contributed to the nursing RAE. She devoted 40%
of her time to R&D and scholarly activity and had a permanent joint appointment but her base was within the trust.

Many groups saw nurse involvement usually as data collectors for others, mostly doctors. For some it was just assumed as ‘part of my role’ (this was from a CNS in NRCM). The R&D manager in NRCM also said:

‘The majority of the nurses… they just do data collection for clinical trials.’

Medical trials were also seen as forming the bulk of research in smaller trusts: in HDM the head of development stated:

‘In primary care, you have got general practices working on their own… Drug company-funded clinical trials, which are quite lucrative, but very minimal involvement in what I would call pure research…’

However, in this trust there was also research being undertaken by clinical psychologists which nurses were involved with: one of the nurse researchers seen was working as a research assistant on one of these projects on eye movement desensitisation. He said: ‘It’s just part of work’.

Culture

Culture was a category that emerged many times. The cultural attitude among nurses generally was perceived as being that nurses don’t do research, don’t understand research, and are frightened of research. It was also perceived that there was an attitude that good nurses are ‘hands-on’ with an associated guilt or reluctance to spend time on research. A lack of assertiveness was identified by R&D managers and organisational culture was also identified as a barrier to NR activity. Some felt that a cultural shift was needed if NR activity is to be increased.
It was thought by many that nurses themselves provided a cultural barrier to research activity, with attitudes of nurses being nurses don’t do research, don’t understand research, are frightened by research and good nurses being seen by other nurses as hands-on rather than research-active. For example, the pediatric research nurse in PDM said:

'If you don't have a uniform on, you're not doing proper work, and if you're in your own clothes then you're not really working.'

The clinical education facilitator in the same trust who had already got her PhD commented on nurses' fears: she was actively trying to motivate nurses and dispel fears that 'it's not such a nasty thing', stating that students were 'still very frightened of research'. Some admitted to these attitudes themselves; for example the pediatric diabetes specialist nurse in NRCM felt:

'There aren't many people who are brave enough to undertake research; or stupid enough!'

She found the research process:

'Daunting, daunting... I guess it's just overwhelming...'

Many nurse consultants echoed these views; one, a NC in psychological therapies in JAM stated that research was seen generally as 'skiving off at the library'.

'Even people like carpenters and electricians have to have updates... but nurses seem to think, once you've done your training, that's the majority of things.'

He stated 'We've always done it this way.' was the prevailing attitude of staff.

The lead nurses also identified cultural factors; the DoN in JAM who held a joint NHS/HEI appointment felt most nurses did not read research papers:

'... sometimes I'm wondering, you know, what is the point in writing into the academic journals, because who bloody reads them anyway?'

Similarly the director of mental health in HDM stated:
'I find most people shy away from it... Some of it is just backlash against nursing being an academic profession. So you will get people saying, "Oh well, we are hands on and it's about doing the work", therefore they don't want to engage upon that kind of thing.'

Many nurses doing research as part of an award commented on feelings of guilt, usually because of the time taken: for example, the PALS manager in DNM, stated:

'In the two years of the MA, I used my holiday to augment what's needed, 'cause it wasn't fair, I felt, to draw on, um, any more time from work... But that was quite costly in terms of not having a holiday... for two years.'

This often produced a reluctance to spend time on research. This same nurse stated:

'One of the tutors... said to me the other day, "When are you starting your PhD?" and I nearly hit him!'

Research managers commented of a lack of assertiveness of nurses. The practice development nurse in PDM stated:

'We always think that if we've got to... implement something, that we can do it on a shoestring... Not have to stick our neck out and say, "No, if I'm going to do that, it is going to cost".'

The R&D manager in NRCM wanted more equality in multiprofessional research:

'I would just see them having an equal role you know, the consultant, the nurse, bringing different perspectives... rather than having different roles: one being the lead and the other being the data collector.'

Finally the head of development in HDM said:

'I do see the proposals that come through from the GPs and I think it is not fair. I think the nurses should be, you know, as canny really.'

Research managers were also more likely to comment on organisational culture as a barrier to NR. The R&D manager in NRCM said:
'I think the culture, this trust... has been fairly disinterested, if not difficult.'

The R&D lead in JAM commented:

'I would like to develop more of a research culture... there is still that conflict between demands of the service.'

It was also seen by some NCs as part of their role to encourage and nurture cultural change, but this was seen as a difficult, long-term process needing organisational support. One NC in cardiology stated:

'You know, you're changing the culture all the time, so that's not without it's disasters on the way... And I don't think it can be left all down to individuals such as myself and other people that are active in research, to take all of that on, you know? There has to be a corporate direction.'

A cultural shift was identified as necessary by some managers, with ideas on how to achieve this provided. The research governance manager in PDM stated:

'Part of that culture change, I think, is in encouraging, um, you know, groups of staff who maybe haven’t been researching before, or haven’t been recognised as researchers'

The R&D manager in DNM linked this to the development of key posts such as NC posts with dedicated research time:

'It’s moving more in that direction, um, around more of the processes enabling people to aspire to those posts and this sort of structure that enables people to move in that direction.'

However, it was recognised that cultural shift was a challenge for some groups of nurses: the executive nurse in HDM felt that:

'There will be a cohort of staff who just don’t want to engage and I think you have got to recognise that.'

Processes
The main dimensions of this category were the **application process for awards** to include **funding and time** and the role of **nursing research coordinators**.

Nurses undertaking research for an academic award often commented on the **application process** to gain a place on the programme. Many of the management grade nurses interviewed went directly to their lead nurse to ask if they could do a Master's degree, whilst others identified it in their annual appraisal: one training development coordinator in HDM stated:

'I've always tried to make sure that on my annual appraisal there is some form of study that's listed... It's always there on the shopping list.'

Some nurses went via line managers in their directorates initially. One health visitor (HV) in HDM who did her Master's course several years previously approached one supportive manager who told her to apply to the trust for funding:

'Because the information isn't widely disseminated about what you can get, and the managers don't know either.'

Many who had done Master's programmes several years previously had self-funded or part-funded their course fees. Some were not aware, when registering for these awards, that there was a possibility of fees being met; one LP in DNM stated: 'I had no idea funding was available'.

Those that were doing a Master's degree at the time of interview mostly had fees met by the NHS via the workforce development confederation (WDC) or similar: all the nurses from JAM were fully funded for course fees, for example.

**Time** to undertake research was an issue for many of the nurses undertaking research: many were given time in theory, especially for taught study days, but:
'Basically, what happens is that you actually just squeeze the rest of your work into four days.'

was a comment from one HV in HDM and a CPN from JAM admitted:

'Needless to say there are some days when I've gone in [to work] anyway.'

Some found that this time disappeared when the dissertation stage was reached; the clinical risk manager in DNM was given 'no additional time'. Those doing awards who received the least time were those who did their degree by distance learning. This was generally done in their own time: a CNS in pain management in NRCM who had done this stated:

'... I have to say, [this] is not the easiest thing to do.'

Dedicated time for research for nurses not doing Master's proved more difficult, especially if they were not in posts where research was an expected part of the role. The clinical education facilitator in PDM was having difficulties in undertaking post-doctoral research:

'There's a big, I don't think I'd call it a stigma, but if I wanted time to go on a course... she [her line manager] would give me time... Whereas when I wanted time to do this research properly, and make it really watertight and credible, it's just, "Well it has got to fit in with the team and if you can... make time, fine.".'

In PDM and NRCM nursing research processes were overseen by a dedicated nursing research coordinator. The role of nursing research coordinators in this process was commented on by both individuals in post. The practice development nurse in PDM who did this work commented:

'My focus is on practice development, so anything to do with policy, making sure that policy is evidence-based... alongside trying to promote and help develop the primary nursing research agenda.'

She emphasised she was not a primary researcher but saw the role more as a facilitator:
'... it would be very much from the developing practice, evidence based, clinical effectiveness side, promoting that agenda. But also being supportive to primary researchers and, kind of, being a coordinating link, if you like, in the chain... I wouldn't see myself as somebody who has got sufficient expertise to help somebody academically'

The other, a nursing research coordinator in NRCM, stated:

'It was originally set up as, to promote evidence-based practice and nursing research... it was to address that, but also to, I guess, to actually to look at how nurses should be... I think probably rather naively, engaging nurses in primary research... I have concentrated my energies on the clinical effectiveness side....'

He also felt he acted more as a facilitator:

'I've acted as something as a filter for people with research questions, to move them on to the RDSU and give them the confidence to approach somebody else'.

**Opportunities**

The dimensions in this category were opportunities for undertaking a funded Master's programme, the seniority of nurses doing research, opportunities for undertaking nursing research, the key role of nurse consultants and research for and in practice.

The increasing availability of funded Master's programmes has meant the NHS seconding staff on a far greater level. The acting head of midwifery in NRCM described how any member of the nursing staff could now put together a 'business plan' for M level study. The head of mental health in HDM said:

'We have been pro-active in securing some of that money to get people MSc training, which, obviously, would mean research in their workplace.'

Others had doubts as to how secure this research was; the assistant director of nursing in DNM was worried that the research element in Master's programmes would disappear:
'There is less people getting research training until a little bit later on, you know... and even some of the Master's programmes don't do a natural research project... and it's really... MPhil/PhD training, when people actually get that experience.'

Opportunities to undertake research seemed, in some trusts, to be linked to seniority. This was especially seen in DNM, where all six research-active nurses interviewed were in management or education posts. In total, of the 38 nurses interviewed across all five trusts, 22 were in management or education-related posts. However, more clinically based nurses were doing research in NRCM, where only three of the nine nurse researchers seen were in senior positions.

Comments were made about opportunities for undertaking nursing research. Funding opportunities were seen by some as limited. The researcher-practitioner in PDM had tried various sources with no success in the past and stated:

'I was so naive.... The only way to get external funding will be to work with other, um, professionals really; joint appointments and things like this.'

A NC in critical care in the same trust who had worked abroad saw mechanisms for funding in the UK as cumbersome and restrictive. She was used to systems abroad where she could 'go knocking on doors' for funding.

However, some felt that opportunities were there if they were searched for; the paediatric nurse consultant in PDM, for example, had managed to employ a research assistant to undertake the data collection, analysis and report writing for a research project using monies from two research grants she had obtained:

'So I've put the proposal through the ethics committee, and then once it was accepted and we got the funding, then she's taken it on board from that point in time'.

Similarly the NC in dermatology in DNM was very proactive in seizing research opportunities and getting funding; she had started a fund from research proceeds.
that were gained from undertaking commercial clinical nursing trials of
dermatology interventions and used this for development, education or research
opportunities:

'Anything that happens in here, whether it comes from the development or
that we see clinically, I say "Here we've got to research this" ... we've got to
research it further.'

Lead nurses also commented on research opportunities. The DoN in PDM felt that
opportunities for NR were rare, but that if someone approached her who was keen
to undertake some research she would try to help them:

'I think it's so unusual, that we would find a way to do it....'

The acting DoN in NRCM felt that opportunities for NR would grow in the trust with
the recent opening of the new medical school:

'I know people have come to work here for that very reason... because of
the forthcoming sort of developments that we are going to see happening.'

Many saw NCs as key in developing nursing research, although some lead
nurses acknowledged it was difficult in practice: the director of nursing in JAM said
of the NCs in his trust:

'They've got no space either to do those, you know, to get off to the library,
to read up to, keep abreast, you know, to keep up to date, so we need to do
something too, to enable them to do that'

The assistant director of nursing in DNM wanted more NC posts in addition to the
two the trust already had:

'We are now having a meeting this week to look at a nurse consultant
post... to try and integrate that... with some research work going along
concurrently.'

Attracting the right caliber of NCs able to undertake research was seen as difficult
in practice: the head of mental health nursing in HDM stated:
'... the biggest block I have in appointing good... nurse consultants, is that they don't have an MSc, and we would not appoint a nurse consultant who didn't have a Master's level qualification.'

Research managers also saw NCs as key. The director of research in PDM commented:

'It's a way forward... because those people do have protected time.'

In DNM the R&D manager was seeing the difference in NR due to the output of NCs:

'... nurse consultant posts, um, those are a key step, I think, they are actually making a difference.'

Finally in this category, research for and in practice was often seen as the way forward for NR, especially by lead nurses. The director of nursing in JAM wanted to see more evaluation research:

'... along the lines of maybe, um, you know, macro sort of stuff like evaluation of services... I think that any new service that you develop should have some evaluative component built into it...'

He had some innovative ideas about ways to achieve this:

'I'd like... make them much more clinical academic centres, so that a lot of the work that goes on there, they're not just in-patient units, but they're actually live laboratories...'

The assistant DoN in DNM also wanted to see more NR based in practice:

' It's actually basing some researchers in the trust, maybe as part of this whole, I mean the whole idea of the academy model might help that.'

The DoN in PDM mentioned collaborative projects in the practice area:

'... [n of NC] gets some primary research going there, but it isn't actually [n]'s, it's actually owned and participated in by all the nursing team. It doesn't matter whether they're D grade or they're G grade.'
Some managers also commented on the need for evaluation research. Some trusts were addressing this in their research strategies. For example, the head of development in HDM stated:

'\textit{We have a research strategy, which identifies the research taking place in the trust must support service delivery}'

The nursing research coordinator in NRCM identified:

'\textit{a lot of what it is nurses are interested in, and allied healthcare professionals, is the service delivery and organisation research and of course we're weak on that in the trust.}'

There were a few comments about research for awards. The R&D manager in NRCM, wanted to see research projects as part of Master's programmes stopped:

'\ldots they\ldots shouldn't be expected to do research involving patients on Master's courses. We just don't think there is sufficient time to do that, and it is better to write the research proposal or anticipate results and discuss it all, without actually having done it\ldots Because so many of them come and get into problems, because they'll\ldots want to get ethical approval\ldots and they start several months after they needed to start.\'

This was already happening in DNM, where the local HEI had recently changed its policy on student projects for some Master's courses, as mentioned earlier.

\textit{Dissemination}

All nurses undertaking research were asked about dissemination plans (see Tables 7.11 to 7.15)

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Table 7.11 Practice development model. Nurses undertaking research: dissemination plans
Table 7.12 Nursing research coordinator model. Nurses undertaking research: dissemination plans

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Table 7.13 Joint appointment model. Nurses undertaking research: dissemination plans

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Table 7.14 Director of nursing model. Nurses undertaking research: dissemination plans

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Table 7.15 Head of development model. Nurses undertaking research: dissemination plans

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Plans for presentations within the trusts were common. In NRCM, the acting head of midwifery required staff undertaking Master's courses to present their research 'within the unit' on completion. JAM had an annual research and development conference, where students had the opportunity to present, which was organised by the workforce development manager who said:

'We need to empower them to disseminate locally and nationally.'

HDM also organised conferences in-house and transmitted health research seminars sent by satellite from the local HEI: the head of development stated:

'We have the seminars going, we have now a lunch time and evening seminars... People came in droves to that conference week that we ran'

However, she thought publications in journals were the least likely outcome of NR, often due to a lack of time and motivation:

'People come back into practice, and they have been given the time off to go to conference, and they are stuck back into work, and it's three months down the line before they even think about it and then they can't be bothered; and the moment has gone and it just doesn't happen.'

This demotivation was commented on by the researchers themselves: 'I don't feel ready for writing again, yet' was one comment from a ward manager in haematology in PDM. Another, a senior nurse for older people in NRCM stated:

'You come back, and you very quickly get sucked back into the day-to-day, and to keep up that motivation and enthusiasm... it was almost, "Oh God I don't want to look at that again."... It was actually quite hard as well to get the support.... If we'd been given a bit of guidance, I probably then would have.'

Another, a genito-urinary medicine nurse advisor in NRCM had disseminated nationally at conference level but said:

'I went all over the country... I spouted my gospel to the world and his wife... I'd had enough; I really had, had enough. I really ran out of steam... My intention had been to write it up, but I didn't.'
One senior nurse in pain control in DNM thought that low publication levels were because 'medics need publications, nurses don’t'; the PALS manager in the same trust commented:

'I haven’t had the strength. I haven’t looked at it; I think the scars are so deep. And it’s good stuff.'

Similar sentiments were echoed by a HV in HDM:

'I couldn’t pick it up for six months. By the time I was able to look at it without screwing my stomach, I couldn’t find any time then to take time out, to think about how I’d write it up… How do you condense 25,000 words or however much it was, into, like, three or five? Well, I tried to cut and paste, but it just didn’t work.'

Those who had the best records of publication were those who were either doing/had done PhDs, or those where they had joint academic appointments. The post-doctoral fellow in NRCM, for example, had published ‘six papers’ from her thesis, and the PhD student in PDM was in the process of writing two papers at the time of interview.

Clinical trials research nurses (CTRNs)

This was a major issue for managers in the two larger trusts (PDM and NRCM), where many clinical trials were undertaken. Several dimensions emerged: they were seen as being under-developed and under-utilised in terms of nursing research; it was felt that this group could be ideally placed to develop nursing research as many of the practical skills needed to undertake research were already in place. It was sometimes felt that it was difficult to monitor activities. Their existence was not always known of, which was frustrating because of RG procedures, and these nurses were not always aware of RG regulations. If the trust was unaware of their existence, they were losing the trusts money within the ‘Support for Science’ budget, and managers felt that many were
unsupported. One trust had set up a research professionals group specifically to support these practitioners and monitor activity.

The under-developed and under-utilised aspects were referred to by the director of R&D in PDM:

'They're employed to do trials for somebody else... The next stage we need to be able to do, is to find a way to enable those people, because many of them are very skilled and very experienced, and could take that step to being researchers themselves if the support was there.'

The R&D manager in NRCM stated:

'They have obviously got staff with some skills in research, who have had some training... they have already got a head start to get those people interested around a research question.'

PDM found it difficult to monitor activities but were trying to improve, as described by the R&D manager:

'One of our lead senior research nurses.... [is] looking after the research nurses, making sure that they're supported...'

The practice development nurse in the same trust commented on the fact that their existence was not always known of:

'... we've never been successful in finding a place just where you can capture that new person as they come into post, and you can never get hold of them right from the beginning.'

PDM had set up a research professionals group to give support and monitor them. The R&D manager said of the forum:

'The research professionals group... is more about sort of practical support, professional development... providing a home for them, really, because... it's still difficult for us to know if you've got tabs on everybody...'

She explained how they could be losing the trust money within the SFS budget if CTRNs were not known of:

'Unfortunately we feel that may well exclude quite a lot of our research nurses... And essentially what they're doing is saying, "Right you've got x number of research active professionals, your R&D management costs are x.", and so we
are potentially excluding very large groups of people, because they tend not to be cited on ethics applications and they're not on publications.'

The practice development nurse, who chaired the research professional's group, stated how the group aimed to provide education for those who were not always aware of RG regulations and provide help to the many unsupported CTRNs:

'They are sort of isolated, they are not pulled into directorate structures for professional support... It is a means of them knowing the professional agenda, of having a regular report from the Director of Nursing... that's its primary objective, to help overcome some of the feelings of isolation as well.'

Summary
This theme was core to all four groups interviewed. Several categories were identified: the low profile of NR, traditions of NR, cultural aspects, research processes and opportunities, dissemination and the potential of clinical trials nurses.

NHS influences
The other theme that was common to all four groups was that of NHS influences on nursing research. Three main categories emerged from this theme: the NHS modernisation policies, the power base in the NHS and finally the research governance framework.

NHS modernisation policies
Eleven dimensions were identified within this category. Individual trust policies were commented on, as was government legislation, often linked with the development of new nursing roles. An opportunity for career researchers to develop clinically was seen by some. The current push towards multiprofessional working was seen to affect NR. Audit requirements were seen by some as a
related activity to NR and the drive for evidence-based practice and clinical effectiveness was seen to influence the type of research that was acceptable in the NHS, and was often seen as more important than primary research, with service delivery and organisation (SDO)/evaluation affecting the type of research that trusts wanted to see developed. There were perceived methods biases in the NHS in favour of quantitative research. It was generally felt that research in the NHS was in a period of transition and some trusts felt penalised with funding under the proposed new funding arrangements for research in the NHS. The government agenda for user participation was also a feature. These will now be explored in more depth.

Individual trust policies were most frequently mentioned by the lead nurses, managers and NCs. Some commented on the lack of a trust nursing research strategy, for example the practice development nurse in PDM stated:

'I could be devising a strategy for nursing research, but then that wouldn't necessarily marry up with the trust research strategy, and I might be investing time and effort in something that, that will be overtaken by another change further on down the line, with research governance and so on'

The NC in cardiology in this trust thought the trust was 'getting there' with a growth in nursing research but felt it couldn't all be left to NCs: "There has to be a corporate direction'.

JAM did not have an overall research strategy at all; the DoN said it was a new trust which 'hasn't got any research profile'. He was planning to develop an R&D strategy for whole trust:

'So that we've got a long term, er, view, I suppose, of what research needs to be done and what we could become experts in…'
Others were frustrated by the funding situation in their trusts. Some trust policies were concerned with local implementation of national policy but identifying internal funding to do this was an issue that was affecting service development; for example the NC for stroke care in NRCM had been concentrating on service reorganisation but stated:

'… we haven't got a specialist stroke service, and that's what we actually need; so I've concentrated my efforts, really, in making sure that, that we're banging the drum about specialist stroke services…. But the service reorganisation hasn't happened, and the posts you need within that service don't exist…'

Three MH NCs in JAM felt that their trust was unable to let them fulfill their potential due to staff shortages, workload and an internal funding crisis, which influenced trust policies and decisions. Words such as 'fire-fighting' were used, and clinical work was seen to take priority with research not possible:

'… when it's busy or a team member is off'.

Finally, some thought that trust bureaucracy caused problems; one NC in PDM felt that bureaucracy and time wasting exercises characterised much of her working environment:

'They do a lot of clinical audit and that falls into the big black hole... We were audited to death'.

The effects of legislation were mentioned, and often linked to new nursing roles by some groups. The executive nurse in HDM said:

'Working time directives on this site will lead us to develop advanced practitioners to cover out of hours... I think increasingly we will be pushing that route back. '

It was also stated that legislation is behind practice, for example nurse prescribing. One NC in dermatology in DNM, for example said:
'And other things, really irritating things like patient group directions... I know I can't prescribe... not the sort of things I need.'

Some managers predicted new roles such as career researchers emerging in the future. For example the NR coordinator in NRCM envisaged:

'People who have a Master's degree clearly line themselves up, could be... they will carry on and enhance their research knowledge with the process of taking a PhD.'

And the R&D manager in this trust linked this to the NC role:

'I think within that career structure, research ought to be advantageous to move you on to a situation where you can achieve a sort of nurse consultant type of role.'

Finally, as reported earlier, PDM was working with their local HEI to develop more RP roles.

Multiprofessional working on research projects was viewed as part of the modernisation agenda especially by lead nurses. The assistant DoN in DNM said:

'Of course the whole bent is really to go multiprofessional now, and inter-professional... actually, who is the researcher? Who is the leader of the team? And you wouldn't then be calling it nursing research. You would be calling it health service research... You have to have somebody in the team who's got the research skills, and we've still got it predominantly in medicine...'

The director of mental health in HDM commented:

'Given the way the world is now that it is unlikely that we will ever get in to, sort of, that sort of purist nursing research. It will be part of a wider research strategy.'

Multiprofessional working was often key for NCs who collaborated with a wide variety of personnel. However, one NC, in critical care in PDM, rejected this approach as not in nursing's best interests:

'I'm going intra-disciplinary at the moment only; because we then have the control of what it is we're asking'.
Audit and the EBP and clinical effectiveness modernisation policies were often mentioned in relation to NR; this was also seen to be tied up with the SDO evaluation research agenda, especially by managers. The director of research in PDM stated:

'We've got an awful lot to do to actually get people thinking in terms of research and effective treatment... I don't think we evaluate enough the effect of what we've done... There is a role for audit, but I don't think it's enough.'

Others thought it was a good way for nurses to get involved in research; the R&D manager in NRCM stated:

'I think it's a good way to start... you know, it is making changes to the ways the services are organised'.

The head of development in HDM felt they were making progress in this direction:

'A lot of new service developments, new innovations based on evidence and people giving fairly sophisticated audit results. So I would feel that is moving along the path to research'

Some saw these processes as more clinically relevant than actually undertaking primary research; the DoN in PDM commented:

'What the bottom line has to be, in terms of research, is in terms of clinical effectiveness, that all professionals are aware of the place of research, the need for evidence-based practice, where to find current evidence, how to appraise it and how to implement it into practice... Which is not primary research.'

In contrast, some of the practitioners undertaking research were vocal in their opposition to audit. One, a clinical education facilitator said:

'There isn't really any support for research, but they're quite happy in practice to do a crappy audit that means nothing... There's no validity and we'd spend hours doing it... I think that people should know that it's no evidence whatsoever... It's just a waste of time... There's no rigour to it.'

Others did not agree and saw audit as a starting point to change practice. One, a paediatric oncology nurse researcher thought:

'We did a huge audit project, which was very well received, and I actually changed practice'
Others were using their own research to influence trust policy: one nurse in JAM, a MH development worker, wanted to establish a new service for personality disorder clients and was using research ‘to provide evidence of the need’ for this; most nurses wanted to see their research change practice: as a directorate senior nurse in DNM stated:

'There's no point doing it unless we can do something with it.'

In HDM, one HV who had finished her Master’s had been able to use the research for follow up work with trust staff, looking at ‘empowerment, communication and culture’.

There were perceived methods biases in the NHS that favoured quantitative research at the expense of qualitative methods. One NC for stroke services based in NRCM commented:

‘Nursing has always suffered a little bit from being that kind of woolly little add-on, you know, “It’s not serious stuff”, you know. “Oh, they’ll probably do a little bit of qualitative research but it won’t amount to much”. ’

Another NC, in elderly care agreed:

‘There is still a huge divide, and there is still this chasm of, “It’s not scientific research”, if it’s er, quantitative data, then it’s not real research and all our research is all the soft and slushy stuff…’

These opinions were backed up by some of the managers. The practice development nurse in PDM said there was:

‘...often times a lack of support at senior level for qualitative methodology’

The R&D manager in NRCM went further:
'There are people, there is a view that says, "Well it's not real research", because you haven't got a control group and these sorts of things... I think our director would rather we did a randomised controlled trial... even in the clinical setting, he'd rather say, "Well look, you know, how should we treat these patients, these outpatients. Let's randomise and do two different treatments... one group sees a consultant and one lot sees a nurse and let's see what the outcomes are."... That is the most robust way of doing it isn't it?'

The nursing research coordinator in this trust was trying to resolve this but stated:

'Somebody needs to fight the patch about qualitative research, about action research, about service delivery and organisation research, and I'm not sure who's going to take that fight back on.'

The director of research in DNM, previously a medical consultant, made similar comments but aimed them directly at medical staff:

'We've got to persuade doctors in hospitals that research into systems is just as valid and maybe much more beneficial than research into purely scientific issues.'

However, the R&D manager in this trust had been prioritizing where the R&D strategy would develop; this was at odds with the comments made by the director:

'I have just written the five strategic aims for the annual report, and if they stay as they currently are, um, the aim is to become a research centre for participating in multi-centre, high quality trials.'

Many managers also commented on the fact that the NHS was in a period of transition in areas such as the new research governance regulations, the demise of project grants and studentships as the regional offices disappeared and the reorganisation of research funding. The R&D lead in JAM said of RG sponsorship:

'It has got to be set up. It is just about to happen but I need to hear really that (n) Partnership, they are definitely going to go ahead'

The loss of regional R&D research funding was lamented by the R&D manager in DNM:

'Research bursaries from the region haven't been available, which was a major loss to the region, and nationally'
The R&D manager in NRCM commented on the proposed national R&D funding arrangements:

'We are in a transition period... they are scrutinizing the money that we have got and saying what are we delivering for that money.'

Managers in PDM felt that with these new funding arrangements large trusts were penalized with R&D funding. The director of research stated:

'... trusts like this, where quite a significant amount of money is allocated as part of our R&D support, and it's about six million here... If that money was to go, it would mean cuts in services because it isn't money that you can save; if every consultant is spending 10% of their time on research then that's part of the Culver money. We couldn't put them all on 90% pay if that money was taken away.'

However, the head of development in HDM, a very small trust in comparison, also felt that her trust was under-funded:

'In fact we are receiving a lower level of funding than most people doing this amount of research receive.'

The final dimension in this category was that of user participation. Managers in two trusts commented on how they were trying to incorporate this modernisation agenda into the research aspect of healthcare. The nursing research coordinator in NRCM stated of the trust's RDSU:

'They talk about consumer involvement and patient involvement all of the time. You know, this is really important and, you know, they have got the big focus group here.'

The director of research in PDM described a research conference that the trust was holding, and stated:

'The afternoon of that day will be opened up to the public, and have demonstrations and posters, and maybe sort of target the type of projects that can be made interesting for the public to see... This trust was ahead of the game in involving the public in things like that.'
Some of the nurses undertaking research had involved users in their research, as shown in Tables 7.16 to 7.20 below.

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Table 7.16 Practice development model. User participation in nursing research

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Table 7.17 Nursing research coordinator model. User participation in nursing research

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Table 7.18 Joint appointment model. User participation in research

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Table 7.19 Director of nursing model. User participation in research

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Table 7.20 Head of development model. User participation in research
As can be seen from the above tables, 19 out of 38 nurses undertook research directly involving clients. However, this did not usually extend to involving users in all stages of the research process such as planning.

User participation was also commented on by the NCs. The NC in PDM for cancer care said, for example:

"We've got user forums... it's about qualitative work, so patient's experiences. So it will be linking in with those forums... that's something that we've actually seen within the cancer services is, services are changing, with the views of, of users being fed in."

The NC in stroke services commented:

"I think that the whole user involvement, service user involvement issues, is changing the face of what is regarded as 'good' evidence..."

### Power base of the NHS

The second category in this theme was the perception of the power base in the NHS. There were three main dimension to this: the first was the tradition of a medical power base, the second was that evaluation and SDO research was not regarded as 'real research' by doctors and the third was the trade-offs used by nurses to cope with power issues.

The perceived tradition of a medical power base was commented on by many groups. Nurses undertaking research often felt that medical staff had unwarranted power over nursing projects, for example a researcher-practitioner in PDM stated:

"Why, when nurses are doing research, should it have to be monitored or screened by the doctor and why is it not the other way round? Well, why should doctors look at our research proposal, criticising our research proposal, why don't we have a similar role?"
A funded PhD student in NRCM felt the same:

'I don't have problems with letting everybody know, it's asking their permission in the first place that I have a problem with.... Consultants and medical staff still have this inbuilt arrogance, and I'm sorry if I'm not politically correct, but it's, "Let's go through the motions but obviously I'll be chairing this and I'll be making the decisions" and it just doesn't work, it's a sop.'

Other nurses commented on the more general aspects of medical power:

'Even the simplest things like audit are very medically led'

was one comment from a directorate senior nurse in DNM, whilst a senior nurse/ LP in the same trust also said:

'It's difficult to convince medics to change practice... they are so deeply entrenched'

This perceived medical dominance was also commented on by some managers. The director of research in PDM, a pharmacist, was the first non-medical appointment to this post. She stated:

"A certain number of them are just so arrogant in their own research... There is that element... no nurse, pharmacist, physio, whatever, could ever be doing anything as academic and as important as they're doing.'

The head of development in HDM thought that things were changing with research governance:

'... I am getting phone calls from people saying: "Someone has contacted me saying they want to do research in our ward or with our patients, is that ok with you?"... Which is nice, because previously, I think, it was a bit of a, sort of, doctor so and so has decided that this research will take place and so it takes place... because of that power thing really... '

The power base was also commented on by lead nurses, for example the DoN in PDM, referring to accessing funding for research:

'As we try and integrate the amount of R&D funding in this trust that is medical, how [do] we actually get our fingers into that...?'
Interestingly, less was said about the medical power base in JAM, the mental health partnership trust; it tended not to feature in most interviews as a notable dimension.

The second dimension was that evaluation and SDO research was not regarded as 'real research' by doctors. The managers in particular commented on this; the director of R&D in DNM stated:

'We need to change the doctors to recognise that research into how the system works is proper research. It doesn't have to be about how many tails you can pull of the monkey before it dies.'

The director of research in PDM had similar experiences:

'I've tried very hard to get some of our very successful academic medics to apply their skills to more health services research, and it's practically impossible. They just are not interested; they don't see it as at all real or valuable. And, of course, they then can't get it published in the journals they'd like to be published in, so it confirms their prejudice that it wasn't worth spending their time on.'

The final dimension in this category was that of trade-offs: ways in which individuals manipulated the system to overcome perceived medical dominance. The R&D manager in PDM said:

'The way I try and sell research to our consultants who are particularly upset at the concept of, "Yes, we'll have more bureaucracy", is that, actually, if you're doing good research, this won't make any difference to you.'

Some NCs used trade-offs to help them achieve their goals. These included things such as using doctors to help acquire funding for nursing projects; one NC in dermatology had set up a fund to develop staff and encourage nursing research:

'I put the majority of the money in there. The doctors add a bit... then that money goes into the trust fund.'
Nurses undertaking research also used tactics to help them. A senior nurse/LP in DNM stated how she was working with junior doctors to try and change attitudes for the future:

‘You teach them, and carry on saying the same things again and again and again, in the hope that one of these days they’ll become a consultant.’

A district nurse in HDM, who was completing a Master’s course, kept a low profile with GPs about her studies:

‘I don’t want to raise the issue too much, ’cause if I’m not there, and things happen, they might say, “You ought to be here”.

However, some refused to do this; one NC in critical care in PDM, who described herself as a radical feminist, preferred to openly challenge existing structures and processes instead:

‘I’ve been very polite…. but um, go for it…. I suppose you go where others fear to tread…’

The research governance framework

This was the final category in this theme and was of particular interest mainly to two groups, the managers and the nurses undertaking research. The main dimensions were the ethics committees, the implementation of RG, and the attitude of doctors to RG.

Ethics committees were commented on particularly by nurses in two trusts, PDM and DNM. In both trusts, committees were perceived by nurses to be difficult to get nursing projects through, biased towards quantitative research methods, and not meeting frequently enough, especially for nurses who were doing awards and were on a narrow timescale. Duplication with research governance was commented on and some saw processes as a threat to the future existence of
small-scale projects. (Nurses doing research in JAM had not reached the stage of having to submit their ethics approval forms therefore it was not possible to gain their perceptions on the process.)

An A&E LP in PDM stated that her application to ethics committees took over three months due to:

'Niggling little points, like dotting i's and crossing t's, and one ethical committee wanted it on one type of paper, and the other on another headed paper.'

A clinical nurse manager in the same trust said she'd been warned of difficulties with qualitative proposals:

'Everybody said, "There's no way it will get through first time, they always come back, especially about qualitative things, so don't be surprised"... I've got a colleague who waited and waited, only to be told: "Oh dear, sorry, it's sat on somebody's desk for four weeks and nobody's looked at it".

She had to delay her dissertation for a month:

'The main frustration was I was told to ring back on a certain day, I rang back, and was told there was no-one in the office for two weeks.'

A ward manager in this trust also had problems and felt that the forms were:

'... incredibly medically orientated, and also completely scientific research orientated. It's very obvious that qualitative research is not as valued.'

A senior nurse in cardiothoracics was delayed for six months:

'They're more hung up about how I was going to have a control... They'd ask you to do a, b and c, I'd do it and send it back, and, "Oh, we'd like d, e and f done now"... I was really hitting my head against the wall... It actually delayed my, my submission date was December. It put me back six months.'

In DNM, a LP in the NICU felt that her choice of methods was limited by the requirements of the committee: pure grounded theory was:

'not possible... in the hospital setting, because of the ethics and things like that.'
(The strict format for proposals meant she had to do a literature review when she submitted her proposal, instead of after she had analysed her data.)

Another nurse in the same trust described how the process caused her great distress:

'... ethics is notoriously difficult to get through, especially with a piece of qualitative research... The ethics was very, very difficult and in fact it's noted, I've actually written in my dissertation, that they at no time gave me actual written approval for my research. I actually had it verbally. There was a blip, a hiatus, a change of chairman and that impacted hugely. It delayed my research by three months, they didn't let me know, nobody called me... it was a very inefficient system. That caused me great distress, actually.'

Another LP in the trust suffered delays:

'I wanted to put it in, in November and she [LREC secretary] said, "No, no, no, make it December". So I physically took them and handed them in, only to be told that the December meeting had been cancelled... So it meant that my ethics and everything was all late.'

Duplication with RG was seen as unnecessary:

'You've got to go through R&D as well, it's like a double part to it.'

The process was seen to be detrimental to students doing small clinical projects; one senior nurse/LP in DNM stated:

'The timescale will affect students, and research will increasingly be done by nurse academics with a clinical hat.'

One of the nurses doing research in PDM, the senior lecturer/ CNS in rheumatology, was a member of the local REC and gave her views as a committee member. She had been on the committee for several years and stated:

'I find that there were times when the health professions let themselves down, which I find very sad, and I do a number of talks within the trust... to try and demystify it... and a bit of PR, because we have dreadful PR. Every one thinks we're awful people, but also to try and improve the standard, because some of what is put in is very poor standard...'

However, she recognised the lack of qualitative expertise on the panel:
I have suggested to the chairman that we invite a qualitative researcher... My general experience is, that actually sometimes... all people doing qualitative work... get a harder time than some of the perhaps major drug projects where there are significant physical risks.'

The implementation of the research governance framework also attracted comments from several groups. Managers were the most vocal about it; they were in the position of setting up the systems and making sure the framework was implemented. They tended to view it as a huge but necessary task, needed to impose structure and aid the monitoring of research. Prior to this, several saw research monitoring as very ad-hoc. The head of development in HDM could see these benefits:

'... I think that means that the research that we get is going to be worth having, and it also, I think, it means that there is some kind of focus and co-ordination in the organisation, in terms of who owns it, where does it get supported, or, you know, where is the central point that we can link in, to say: "Does anyone else know about this?".'

The R&D manager in PDM also commented:

'I mean it's great, it is to research what clinical governance is to clinical practice, and I'm sort of saying that you won't hush anything.'

The practice development nurse in the same trust could see potential for identifying nurses who were research active with the new measures:

'We've discussed before, but never really known, how many nurses are out there that have got, have done a dissertation, in what subject.'

The R&D manager in NRCM commented on prior processes:

'Traditionally it has just been an unmanaged process, because you have got, you've got academics actually receiving grants and doing some high quality research, and you have got other people within the trust, consultants and others doing small projects, but really an unmanaged and unfocused in a poor... way'

Some of the nurses undertaking research commented on the RG procedures, with comments made such as this one, from a ward manager in PDM:
'I was frustrated by the beaurocracy in the trust, completely frustrated."

Others saw it as even more frustrating than ethical approval, for example the haematology research nurse in NRCM said:

'It isn't always the ethics that can take a great deal of time, it's more data protection, finance... it can take several months to get a clinical trial through. '

One senior nurse/LP in DNM predicted:

'I've a nasty feeling it will mean the end to nursing research clinically... it's going to be difficult."

These thoughts on beaurocracy linked with the perceptions of managers on the attitudes of doctors to RG, with doctors historically used to 'doing their own thing' with no monitoring, often seeing administrative processes as a waste of time. PDM was particularly affected: it was so large and research was so widespread, that day-to-day management of research was in the hands of R&D peer groups, chaired by a doctor, in each directorate. The R&D manager said:

'We have a research leader in each of the clinical directorates, a senior consultant, and they're supposed to chair a Research and Development peer support group... It's their responsibility to assess every proposal before it starts, to check scientific quality...'

But the R&D director in the trust stated of this system:

'We've got some directorates where they really are very good, and we've other directorates where we know they never meet...'

The RG manager was trying to educate staff who worked with doctors, such as medical clerks, in RG processes:

'Medical records clerks who might, you know, not be aware that they can't give a consultant a load of patient records to take home, to write up some research over the weekend...'

but she felt that many were ignoring the requirements:
'Maybe if we had a disaster or two, we might actually get taken a bit more seriously, (laughs) it's dreadful, but that seems to be the way that things happen.'

The R&D manager in NRCM felt that RG provided a 'top down' approach to monitoring research, which presented challenges:

'...the expectation in the brave new world is that we are actually trying to manage, you know, the top-down way on research... which is difficult...'

Summary of findings

The theme of NHS influences was also common to all groups. The modernisation agenda, audit and EBP, the medical power base, and ethics/ RG were all identified as impacting on NR activity.

Support systems

This was a shared theme between three of the four groups: the NCs, nurses undertaking research and the lead nurses. These groups discussed their perceptions of the support available for nurse researchers. Three categories were identified: networks, support and relationships.

Networks

Six main dimensions emerged in this category. Nurses undertaking research and NCs identified networks such as peer groups and others whilst NCs also often mentioned internal trust networks and NC forums and external networks. NCs and lead trust nurses regarded the higher education institutions as networks (whereas nurses undertaking research mostly put HEIs in the category of support, and managers regarded them as partners, as
will be discussed later). Lead nurses also talked about their networks with 
workforce development confederations.

Nurses undertaking research often networked with peer groups – usually 
peers undertaking the same award or who already had a Master's degree, for 
example a clinical risk manager in DNM stated of her Master's cohort:

'We were a fantastic group and formed a very close knit group, and 
that's one thing that I miss a lot now really.'

NCs also networked with peers, usually fellow NCs; the NC for cardiology in PDM 
said:

'All the four [nurse] consultants from (name of trust) are having to do a 
presentation to the trust board .... And so we got together and decided, you know, 
headings for slides so we would all have the same format'

Some nurses doing research also networked with others such as NCs, 
psychologists or other HCPs. For example, the training development 
coordinator in HDM had networks with the 'care coordinators' in social 
services.

The over-riding comment from nurses undertaking research was that they 
wanted to see formal networks set up for mentorship, as there was a lack of 
mentors available. One stated:

'... the trust finds people like myself who have been through the process 
who know some of the pitfalls - we're not experts but we've been through the 
pain - to work with those groups of people about how they get through the 
process.'

Some NCs had forged links with others such as charities or commercial 
companies to gain funding for projects, provide advice and help to them or to gain 
information themselves. For example, the NC in dermatology in DNM had
collaborated with a cancer charity to set up initially a telephone help line, then an internet website:

'I have a clinical nurse specialist, I've got the funding for her.... and she works with the (name) cancer trust, updating the website and putting anything new on; she does that and I direct the lot really'

Most NCs seem to have built up **internal trust networks** with colleagues, managers and/or research support systems:

'I know who I can access; I know who's out there'

was the comment from the NC in dermatology in DNM. Many NCs also networked with **NC forums and external networks** and had to work and liaise with a wide variety of people in many situations, locally, regionally and nationally within their field and at the margins; the NC in cancer care in PDM, for example, was working strategically in the region which involved networking and collaborating with many organisations:

'I cover seven acute trusts and twelve primary care trusts and um have links with higher education, workforce confederations…'

All NCs had a contract with a **higher education institution** (all except one of these were honorary) to contribute to educational activities and/or research in conjunction with the HEI. Those NCs who had previously worked in universities tended to maintain links and networked with past colleagues, as well as delivering educational input. Figure 7.5 shows how many NCs linked with HEIs:
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<tr>
<th>Extensive links</th>
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<td>Nurse consultant 2 (Paediatric ICU PDM)</td>
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Key to abbreviations: PDM = practice development model, ICU = intensive care unit, DNM = director of nursing model, JAM = joint appointment model, A&E = accident and emergency, MH = mental health, NRCM = nursing research coordinator model

Figure 7.5 Nurse consultants: links with higher education institutions

Lead nurses also described networks with HEIs. Some lead nurses felt they had excellent links, for example the acting DoN in NRCM stated that trust staff were actively involved with curriculum development and educational activities:

'(N), who is a diabetic nurse specialist, she already lectures. She actually put together the Master's degree programme for diabetes…'

Other lead nurses felt that links could be better. The DoN in JAM, who held a joint appointment as a principal lecturer with the local HEI, said:

'I really think we should be working much more collaboratively with the university. I still think it's, like, there's the university down there, there's the trust over here, and I want there to be a lot more integration.'
Finally in this category, four lead nurses spoke of their networks with the workforce development confederation (WDC). For example, the acting DoN in NRCM stated:

'I also link in with the workforce development confederation, as part of the workforce planning initiative'

**Support**

This was the second category to emerge and contained two dimensions. Support provided for nurse researchers was the first, and support provided by nurse researchers to others was the second. Tables 7.21 to 7.25 show the support systems of nurses undertaking research by trust.

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Key to abbreviations: HEI = higher education institution, R&D = research and development, RDSU = research and development support unit.

**Table 7.21 Practice development model. Support received/ provided by nurses undertaking research**
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Key to abbreviations: HEI = higher education institution, R&D = research and development, RDSU = research and development support unit.

**Table 7.22 Nursing research coordinator model. Support received/ provided by nurses undertaking research**

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Key to abbreviations: HEI = higher education institution, R&D = research and development, RDSU = research and development support unit.

**Table 7.23 Joint appointment model. Support received/ provided by nurses undertaking research**

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Key to abbreviations: HEI = higher education institution, R&D = research and development, RDSU = research and development support unit.

**Table 7.24 Director of nursing model. Support received/ provided by nurses undertaking research**

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Table 7.25 Head of development model. Support received/ provided by nurses undertaking research

Support provided for nurse researchers was discussed by all three groups. Nurses undertaking research, especially those doing it as part of an academic award, frequently discussed the levels of support they got from their HEIs. There were mixed comments about their experiences; some perceived they had been given excellent levels of support, for example, a directorate senior nurse in DNM told of how her supervisor was prepared to go with her if she needed to go to an LREC meeting and felt she had 'tremendous support'. Others felt less happy; a primary care MH development worker in JAM wanted to see more 'joint thinking' between the HEI and NHS; this was echoed by the workforce development manager in the same trust who wanted to see more joint appointments and closer working links and also by a HV in HDM who felt there was 'a lack of joined up thinking'. She stated:

'There needs to be more dialogue between the university and the trust, on what the trusts are wanting and what the university can provide.'

The PALS manager in DNM felt that supervision '... was a very precious thing' but she also had criticisms:
'HEIs should not expect students to be finishing module assignments and work on their dissertation at the same time: you're producing essays at the same time as you're doing your dissertation.'

Some who were doing degrees with HEIs that were not local felt less well supported: a paediatric oncology research nurse in PDM felt support was:

'Quite limited because it is an inter-professional Master's degree and it is based in [n of city in another region]...'

A HV lead in HDM found supervision by telephone 'difficult' and a community psychiatric nurse (CPN) in HDM who was doing a distance learning award, also had telephone supervision for his Master's degree which 'was hard'; he described having problems with arranging times for supervision telephone calls. A ward manager in PDM said her supervisor was 'excellent' but left her to make her own decisions, which was 'good experience but hard.' She also disliked telephone tutorials: 'it's not the same over the phone.'

Nurses undertaking research who held joint appointments as LPs or RPs also commented on their support. One RP in PDM felt she had plenty of support from the HEI who paid 40% of her salary. She used information services and IT experts, attended advanced research seminars and had been allocated a mentor:

'Now I realise the benefit of having, um, one foot in each camp. Previously, I saw it as quite challenging in terms of workload... but I do feel I'm given more time to reflect.'

Other nurses who were doing research outside of awards or contracts with HEIs also recounted their experiences; one clinical education facilitator in PDM, who had a PhD and was trying to expand her research portfolio, said the local HEI was not supporting her current project:

'They didn't feel they had time to input. It would have been much stronger had they, um, I mean perhaps I didn't approach the right person... They'll meet with us and talk with us, but, you know, they don't really want to do anything...'}
Levels of support from trusts were also discussed. All NCs except two had used NHS research support systems such as their local RDSUs or trust R&D departments (see Figure 7.6). Positive comments were generally made about the services such as ‘really good... very helpful’, and ‘it was very easy ’ with the NC in DNM saying:

‘It was my, when I was feeling at my loneliest, and you don’t know who to turn to... but when I went upstairs and ... I put mine into (name) up there. She’s wonderful and she does so much work for me, like looking at the funding, going between my applications, talking me through, seeing something for me, checked if I’d do this...’

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<tr>
<th>Nurse consultant 1 (Critical care PDM)</th>
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Key to abbreviations: PDM = practice development model, ICU = intensive care unit, DNM = director of nursing model, JAM = joint appointment model, A&E = accident and emergency, MH = mental health, NRCM = nursing research coordinator model

Figure 7.6 Nurse consultants: support received from research and development support units and/or research and development departments
Nurses undertaking research also used the RDSU/R&D departments extensively and the comments were mostly extremely positive about the levels of support received. For example, the vascular senior research nurse in PDM stated:

'The statistician in RDSU... taught me loads...I must admit I had an appointment with her every week for about 8 weeks.'

There were a few nurses undertaking research who did not use these facilities, mostly those who were undertaking awards, who felt their HEI supervision was enough; for example the health advisor in genito-urinary medicine in NRCM did not use the RDSU because: 'I really did have a superb personal tutor.'

Very few had negative experiences of these services but a few comments were made by highly experienced researchers that the levels of knowledge available in the RDSUs were not detailed enough for their needs: the clinical education facilitator in PDM, who already had a doctorate, felt the RDSU was of limited use to more experienced/ senior researchers, and staff were 'not very knowledgeable about methodological issues'. One nurse in NRCM reported a negative experience with support from the trust's R&D department; this nurse had won a research grant but had never undertaken research before and was not doing an award; she felt more help should have been forthcoming:

'[I] spoke to [n of R&D manager] and [n of NR coordinator] about it and we had a meeting and I just said, you know, "I am really disappointed that I haven't had more backing because the idea was you had been asked to help me".'

Lead nurses also commented on the R&D/RDSU facilities. The acting DoN in NRCM (where this last nurse was unhappy with R&D support) stated:

'(N of R&D manager) over in the research unit is just fantastic because he will help them sort of grow up from the seed right through to the tree'
The assistant DoN in DNM stated:

'The R&D office, I mean we have got a very good support service, excellent support service... education, training is going on all the time for doing research.'

The head of MH in HDM felt, however, that these services were under-used:

'**My suspicion is that they don’t make very good use of them but that is about it all being quite new system and it is all beginning to kick in.**'

Overall, the services provided were highly regarded and used by most of the researchers.

Other trust resources were mentioned. Trust libraries were frequently mentioned with comments such as:

'The library here supplied me with all the papers that I required. They are absolutely fantastic'

from the vascular senior nurse in PDM.

Several of the nurses doing research talked of receiving support from NCs, lead nurses or other staff; a rehabilitation staff nurse in JAM talked of good support at a 'high level' in the trust, but was less satisfied with her line manager’s support: 'Not all managers are particularly helpful or supportive'.

NCs also commented on support from managers. Management support was mostly from the trust’s director of nursing or lead nurse and most NCs fell outside of traditional NHS line management structures; seven of the ten were extremely happy with the support they got from their director of nursing but three mental health practitioners, all working in the same trust, wanted more management support (see Figure 7.7).
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**Figure 7.7 Nurse consultants: perceptions of support received from managers**

One of these stated:

*'For instance today I've had supervision for the first time since October'*

(This was in May, seven months since he had last had any clinical supervision.)

NCs also commented on support received from medical staff. This was mixed, for example the NC for stroke care received excellent support from the consultant physician but had a mixed reception from GPs:

*'GP, um, well I think the whole range of what you might expect.... Fortunately... I had support from (n of consultant physician) ... He got involved and just, you know, basically his response was "Well, you know, that's what (NC's name)'s employed to do".'
Several perceived that they were only supported when they lightened the doctor's workloads: one, who worked in the acute sector, commented that she was supported when she was prepared to deal with aspects of care such as psychological issues or setting up new services:

'Doctors can't be bothered with that, and that's going to take up too much of their time.... And also very supportive from the point of view of, um, when I'm trying to set up clinics and if I'm offering my services'.

Lead nurses gave their perspectives on support for staff doing research. The DoN in PDM told of how monies had been put aside for education by her predecessor:

'She put £10,000 a year on the side, as well for another pot for Master's for nurses, which don't sound a lot, but actually when you look on the modular programme it's funded quite a few people through master's.'

The acting DoN in NRCM said of her research-active nurses:

'I feel hugely proud, and I know (name), who is the director of nursing, is very passionate about nursing research and actually bringing nurses to the fore.'

Both of these trusts had posts where a named nurse was coordinating nursing research activity. The director of MH in HDM was developing Master's level staff:

'We have a low academic base, so until that is built up, which is partly why again we are supporting the push for more people to do academic courses such as the degrees and the Master's, we will support that.'

Lead nurses also mentioned other support such as clinical governance and audit frameworks. The assistant DoN in DNM, for example, told of how they were:

'Using the clinical audit model to do a little bit of research training'

Several lead nurses saw the NCs as key in providing support for staff undertaking research. The assistant DoN in DNM commented:

'The nurse consultant model should be the model that would lead, really, because their leadership is around clinical practice, education and research.'
A few nurses mentioned families as providing support. A paediatric research nurse in PDM told of how her husband worked in information technology (IT) and 'troubleshoots' with IT problems; and a HV in HDM told of how her husband was a 'senior lecturer' in a local HEI and provided support with her Master's dissertation.

The other dimension that emerged in this category was support provided by nurse researchers to others. NCs were often able to provide support in all areas: practice development, research, education and leadership (see Figure 7.8).

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<th>Nurse consultant 1</th>
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Key to abbreviations: PDM = practice development model, ICU = intensive care unit, DNM = director of nursing model, JAM = joint appointment model, A&E = accident and emergency, MH = mental health, NRCM = nursing research coordinator model

Figure 7.8 Nurse consultants: support provided to others

The NC in paediatric ICU in PDM said:
'I established what we call the (name) regional paediatric high dependency working group... Not only will I kind of chair those meetings... but also staff will ring me to ask advice...'

Many NCs regarded themselves as empowerers of staff who were key in raising awareness and taking nursing forward; one, for example, stated: ‘... empowerment is where I'm coming from’. Some NCs who were less confident about undertaking research themselves did, however, feel able to support staff who were doing research as part of higher degrees: the NC for care of the older person in PDM saw it as more important than doing research herself, stating: ‘I quite enjoyed that’.

As seen in Tables 7.21 to 7.25 above, most nurses undertaking research also provided support to others. A funded PhD student in NRCM told of how those doing research acted as 'fonts of knowledge' for others:

'We see ourselves as almost selling points for it, too, passing on information.'

Support was provided in many research-related areas such as education about research findings, EBP, mentorship and facilitation, especially by nurses who had joint appointments with HEIs. For example a district nurse (DN) in HDM commented: 'I'm literally mentoring everybody, I'm facilitating everybody'.

Relationships

This was the final category to emerge within this theme and was discussed by both nurse consultants and nurses undertaking research. Two main dimensions were identified: perceptions of others and working relationships.
Those who mentioned perceptions of others usually discussed the perceptions of nursing colleagues, medical staff and/or line managers. NCs were often uncertain as to how they were viewed by colleagues:

'I'm not sure that you ever really know; I mean, my, my feelings are that they are supportive of the role…'

was one comment, whilst some reported professional antagonism, usually not from direct colleagues but from other nurses who were specialists in their field: one NC in DNM used 'swimming with sharks' as an analogy, stating:

'The biggest shark pool? Our nursing colleagues… The biggest shark pool for me is my own nursing profession, my own speciality and high up within the speciality.'

Nurse researchers also reported similar problems: one clinical education facilitator in PDM had found a problem with 'professional jealousy' with other nurse specialists. The GUM health advisor in NRCM also found some mixed reactions: some colleagues were 'incredibly understanding' but others didn't like it:

'… when I was taking time off, even though it was really in my own time. That was a bit hard to take sometimes, because if you were working really hard, and there were sarcastic comments being made, you felt a bit miserable.'

However, others did not have these problems. A clinical nurse manager in the same trust said colleagues were 'very helpful'.

Perceptions of medical staff were also discussed by both groups. One NC in MH liaison stated that doctors saw her as 'only' a nurse consultant; another NC for care of the older person, said that nurse researchers were 'vulnerable to be criticised' by doctors.
Nurses undertaking research also voiced their experiences. A primary care MH worker in JAM stated that doctors 'look down' on qualitative approaches. In a similar vein a district nurse in HDM stated that the GPs in her practice said:

'I'm just a nurse: as far as they're concerned I'm their district nurse... I've been told, not so much now, that GPs find it maybe a bit challenging when they find that their district nurse is doing more: "What for?"... I can just hear it now. '

Comments were also made about manager's perceptions, mostly by nurses undertaking research. These were mixed. The workforce development manager in JAM stated:

'We've loads of work to do with managers to change that culture that people aren't just here to work, but also to develop the service. I often get into conflict with managers about this... it's just about changing that culture.'

Some felt that they had received good support; a senior nurse in NRCM stated:

'I had a huge amount of support from my manager at that time.'

Working relationships were also mentioned. When working with nurses, NCs often challenged the system, and empowered nursing colleagues, as expressed by the NC for cancer care:

'The basis of the role was to give nurses and allied health professionals a voice in cancer services. Um, so one of my roles is to be that voice, to be that champion...'

Other NCs described working relationships with doctors. Working relationships with doctors were mixed: they seemed to be good when they took on doctor's work without question and developed services in a way that benefited doctors as well as users (see Figure 7:9) Those NCs that were more challenging and assertive and less prepared to undertake medical roles had more difficulties in their working relationships with medical staff: one NC in stroke care found that his presence was resented by a few GPs, one of whom:
'Strongly objected to me getting involved in, in patients' care at all.... He was quite affronted'.

The NC in critical care in PDM, who rejected the medical model of care told of how:

'Doctors will challenge me in meetings and large groups when I’m doing presentations…'

However, the NC in dermatology in DNM who was undertaking work previously done by doctors stated: ‘the medics gave me 100% support’.

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<th>Excellent</th>
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Key to abbreviations: PDM = practice development model, ICU = intensive care unit, DNM = director of nursing model, JAM = joint appointment model, A&E = accident and emergency, MH = mental health, NRCM = nursing research coordinator model

**Figure 7.9 Nurse consultants: working relationships with medical staff**

A post-doctoral research fellow in NRCM was encouraged to take a PhD initially by the medical professor in the unit where she was a research nurse:

'It was really (n of professor) who said that the way I worked was effective and efficient enough to be able to do the job.'
However, a funded PhD student in the same trust had mixed feelings about working relationships with doctors:

'The obstetricians would all, I think, like to be involved in the research as in putting their names on it, but um... not too keen on actually doing it.'

In contrast, a clinical nurse manager in this trust said working relations with medical staff were 'excellent; I couldn't fault it.' Other nurses felt that doctors still expected to be the dominant force in healthcare: a senior nurse in DNM said that doctors 'find it hard' for nurses to 'have a voice' and to realise 'that they do have a brain; but barriers are beginning to shift.'

Nurses undertaking research also talked of their working relationships with others. Some described working relationships with nurses; a CPN in JAM said of his relationship with MH colleagues: 'there has been no change in our relationship' with the work being seen as part of the process of continuing education. But he did feel his relationship with other team members such as HVs and GPNs in the GP practice where he was based 'has been improved.'

Working relations with line managers was also discussed by some nurses undertaking research. Three mental health NCs were frustrated by the internal working relationships with trust managers. One, frustrated at having to take managerial responsibilities, said:

'It wasn't mentioned at interview but they rang me and said, "Oh, by the way, this will mean that you will be included on the on call duty managers' rota", you know, so it was very naughty.'

The management in this organisation was seen as thinking short-term, which increased workload and made future planning and service development difficult:

'We're very, we're very much a short-term thinking service, where we deal with, you know, the crisis and then move onto the next one, because there's very little forward planning.'
The training development coordinator in HDM also commented:

'The managers need to get their head round some of this stuff about research and research time... So they've got some format to follow... But it's the, "Yes", the smiling, "Yes, go and do it" and then not supporting it. Just paying lip-service.'

Summary

Within this theme, nurses undertaking research, nurse consultants and lead nurses discussed support systems such as networks, internal trust support and external support, along with the provision of support for others and perceptions of working relationships.

Individual influences

The second shared theme was that of individual influences. Three of the four groups shared this theme: nurses undertaking research, nurse consultants and lead nurses. Within this theme, three categories emerged: motivation, attributes and personal sacrifices.

Motivation

Individual motivations for undertaking or encouraging research were often cited. There were three dimensions to this category: some were job-related such as a desire for change, evaluation of practice, or part of the job. Other motivations were more personal, for example, career progression, the gaining of an academic award, the kudos of undertaking research, own interest in doing research, a need to prove they could do it, a desire for autonomy or being the next logical step. The other motivational factor was professional motivations - the professionalisation of nursing, empowerment of nurses and the development of research active nurses.
Job-related motivation was a commonly mentioned dimension. A desire for change or evaluation of practice was cited by several as the motivating factor; for example the clinical education facilitator in PDM stated she wanted to change the views of nurses she was educating in order to 'inspire people, rather than frighten them' about research, and a CPN in HDM wanted 'to change or validate practice'. Several nurses doing research for Master's awards evaluated practice, such as the PALS manager in DNM who had felt there were:

'... issues in the integration of health and social care in the community' that needed investigation. NCs were also motivated by a desire for change and evaluated practice in their research: the NC in paediatric ICU in PDM wanted to 'raise the profile' of nursing research. All NCs except three MH consultants demonstrated a strong desire for change in their field of practice (see Figure 7.10).
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<td>10 (A&amp;E MH liaison 2 JAM)</td>
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Key to abbreviations: PDM = practice development model, ICU = intensive care unit, DNM = director of nursing model, JAM = joint appointment model, A&E = accident and emergency, MH = mental health, NRCM = nursing research coordinator model

**Figure 7.10 Nurse consultants: desire for change**

For example, one NC in PDM described herself as a 'radical feminist' and her desire for change centred on challenging medical domination of nurses and nursing, which she linked to gender issues. Others identified undertaking or facilitating research as a means to achieve successful change in practice:

"I feel very much that my role is, is instigating research and facilitating others undertaking it, heightening awareness of the need for nursing research, the need for evidence based practice" 

Many lead nurses wanted also more evaluation research to take place: the acting DoN in NRCM stated:

"It is about engaging nurses and actually utilising their work, and for us to put that on our portfolios as a trust so we can help them."
The executive nurse in HDM felt changes in practice should be evaluated to further enhance and develop practice:

"Change would take place over six months, but we can then sit back and evaluate it, and then say, "Right, push the borders out a tiny bit more: is there anything else we can look at doing"."

Several interviewees were undertaking research as part of their job. NCs have this built in as one of the four domains of their role (DoH 1999b), but some of the nurses undertaking research were also in research posts, for example the solid tumours research nurse and haematology research nurse in NRCM. (These were posts set up to run medical clinical trials but funding had also been obtained by their nurse manager for a half day per week to develop nursing research.) Some of those seen who were in joint clinical/academic posts also felt that undertaking research was part of their job, such as the CNS/SL in rheumatology in PDM who was expected by her HEI to undertake research and had developed her own research programme:

"My five year programme plan is for three areas of research. The first area was about what is important to patients, in terms of service, issues and in terms of symptom management and outcomes. The next thing is to look at how we measure those outcomes, which reflect things that are important to patients... The third thing that I have to do, is to look at what health professionals want to research into, in terms of their own service delivery and interventions."

Personal motivations were frequently discussed by all three groups. Career progression, often linked with the gaining of an academic award, was frequently mentioned by nurses undertaking research, some of whom had their sights set on a NC post (eight interviewees mentioned this as desirable). For example, the paediatric oncology research nurse in the PDM stated:

"I would like to be a nurse consultant in cancer care, or a nurse consultant in research..."
Others were hoping to move into management posts or had moved into management on completion of their Master's awards; the clinical risk manager in DNM had gained promotion to a manager from a clinical coordinator's post, for example, and felt that her studies had aided this promotion because of a 'current knowledge of NHS policy' and 'higher level of working'.

A few NCs commented on the personal kudos of undertaking research; the NC in stroke care in NRCM stated:

'There's a sort of personal thing in there, you know, I'd like to get some work published, you know. I mean, you know, publishing the odd article here and there... is one thing, but actually doing primary research and having that published is a whole other thing to go at...'

Some had their own interest in undertaking research, or a need to prove they could do it. A staff nurse in the eye hospital in PDM stated: 'I have this ability to ask questions' whilst a paediatric specialist nurse in NRCM, who had obtained a research grant and undertaken the research, but had no experience of research prior to this, stated:

'You know it's a feather in the hat... now I do feel proud that I did it.'

A few professed a desire for autonomy and felt research posts to be a means to achieve this: the solid tumour research nurse in NRCM wanted to work 'a bit more independently'; the researcher/practitioner in the PDM enjoyed the 'freedom' of her role, saying: 'I'm a very autonomous person'.

The other personal agenda was the research being the logical next step from previous work; for example, the ward manager in haematology in the PDM felt that 'the MSc was the next logical step' after a first degree, as did a senior nurse in cardiothoracics in the same trust; a CPN in JAM echoed this, saying:
'You get into a habit almost... that was just the next thing'. This attitude carried forward for some of those who were doing or held PhDs: a funded PhD student in NRCM felt that the PhD was the next step after her Master's degree, realising she 'wanted to do it' whilst a post-doctoral research fellow from the same trust felt the fellowship to be the next logical step after her PhD.

The final motivational dimension was professional motivations - the professionalisation and empowerment of nursing, and the development of research active nurses. These were frequently mentioned by lead nurses and often by NCs. The acting DoN in NRCM stated:

'I think research, you know, it's live and it's pushing out the boundaries that are of nursing.'

The director of MH in HDM saw NCs as key:

'Because they will be part of this change agent, and this professional leverage, to actually raise the status of nursing to do some of that academic work, and actually promote more positive practice.'

The DoN in JAM wanted to empower nurses to publish and undertake further research:

'I'm hoping that they will do projects which will impact on the work that they do, but also that they will be able to get something out of, you know? So it's not just a project that sits on the shelf, but they actually get some publication out of it, and perhaps, you know, move it into a larger research project.'

The acting head of midwifery in NRCM wanted to see 25% of the midwifery workforce with Master's degrees within five years but also stated: '... mind you, 25% might be a bit optimistic.' (There were about 8% who held these degrees at that time.)

NCs frequently talked of empowering nurses. A NC in cardiology in the PDM saw empowerment of staff as important, and advised them, with regard to
research, 'You can just do it'. The NC in dermatology in DNM, who had set up a trust fund, used this to empower nurses:

'I can apply to that trust fund to buy books, and to send staff on courses that they want to go on.'

**Attributes**

The second category within this theme was attributes of the individual. This category emerged only in the NC group, and was specifically related to role achievement rather than research. This data has therefore been reported and discussed separately (Woodward et al. 2005a, 2005b) Data reported here are from three dimensions that specifically related to research activity.

Those who had not had prior experience of undertaking research, especially those who did not hold a Masters degree, were less likely to be undertaking primary research themselves (see Tables 7.26 and 7.27).
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Key to abbreviations: PDM = practice development model, ICU = intensive care unit, DNM = director of nursing model, JAM = joint appointment model, A&E = accident and emergency, MH = mental health, NRCM = nursing research coordinator model

**Table 7.26 Nurse consultants: possession of Masters degree**
Table 7.27 Nurse consultants: research activity

The NC in paediatric ICU in the PDM, who had already gained two research grants, stated:

'I have done research... I did a phenomenology study not so long ago looking at parent’s perceptions of living through their child’s suffering....'

One NC for older people working in the same trust, who had struggled with a dissertation, did not want to undertake further primary research:

'My final draft that I’d submitted, my supervisor was really unhappy with it and I seemed to have completely lost the plot'.

Another, in A&E MH liaison in JAM, who was not registered for a higher degree, and also was not undertaking research, stated:

'I’ve got a lot of steps to make in the process'.
Determination was highlighted. One talked of how she got nurses to attend her research interest group: ‘hound them, drag them in’, others were determined to assert their views in situations that might intimidate others: the NC in cardiology in PDM stated:

‘I met the director of the British Heart Foundation… very nice chap but I asked him specifically “So when is the British Heart Foundation going to be sponsoring some nursing research then?” And he was very defensive…’

High levels of self-confidence enabled these practitioners to challenge, achieve change and ‘fight their corner’, for example the NC in dermatology in DNM rejected two suggested supervisors for her PhD studies:

‘… I did a background search on all their publications to say, “Well, just tell me what you’ve got….” Not one of them, not one of them, and I was looking at three or four others, a) published anything in cancer nursing, b) had anything to do with psychology, or, you know, qualitative research’

She changed institutions, having successfully approached an academic whom she had identified as the best person for her needs.

Personal sacrifices

The final category in this theme was that of personal sacrifice. Two dimensions arose: some of the nurses undertaking research perceived that many personal sacrifices were needed in order to do this, especially those doing research for academic awards. Many felt that the extent of this was under-appreciated by the NHS, colleagues and HEIS.

Personal sacrifices were particularly talked of by nurses doing research for academic awards. These included sacrificing jobs and salaries; for example, a full-
time PhD student in PDM stated: 'I sacrificed my salary to do it full-time' and felt there was no guarantee of employment at the end of the research.

Some commented on the personal implications to include time and home life.

A vascular senior research nurse in PDM had done her MSc:

'Patients came back in the evening, because I had to do the investigations after the NHS clinical sessions.'

A health advisor in the GUM clinic in NRCM said:

'Basically, the house didn't get cleaned for two years, my husband learned to do the shopping, the children learned to do their own ironing, but basically I didn't see them really for two years.'

In the same vein, a team manager in JAM spoke of 'lost weekends and evenings' with his family. A directorate senior nurse in DNM felt this had ramifications for undertaking future research: 'I don't think it is feasible at all'. A LP in NICU in the same trust who had done a Master's degree, commented 'I found that quite stressful... and time consuming' and said: 'I'm not doing my PhD.' A clinical risk manager in the same trust only managed to complete because she worked part-time:

'I found it very difficult to do it in the evenings, I can't work at weekends with the children, um, so the only way I could do it, was because I had that day off... You've got to be very dedicated...'

The PALS manager in this trust also spoke of sacrificing holidays and home life:

'I'm not a good student. It really affects my home life, it affects my work, because I give it my all, and I don't want to be working... I'm tired of studying, I want weekends of gardening and reading and traveling...'

and thought this had had more profound effects on her personally:

'It changes you as a person, you feel you don't have conversations with people any more.'
Other comments were about a variety of areas, for example, the hours spent travelling. One CPN in JAM had long periods of travel involved to get to the HEI, sometimes a three-hour journey for a one-hour lecture, 'which was a nightmare'. Some spoke of feelings of guilt, for example a DN in HDM felt 'guilty when they are very short staffed' taking time out for the study day. Another felt guilty because she was ill and had to extend her studies:

'I almost, kind of, felt guilty, and I don’t think I’m alone in that, of actually taking the time out.'

Some, who had funded their own studies, talked of financial sacrifice. A HV in this trust said:

'I was prepared to go without other things in order to fund my academic progression.'

The training development coordinator in this trust told of how 'juggling becomes a considerable part of the process.'

Nurses doing research that was not part of an award also talked of sacrifices. For example, the paediatric research nurse in the PDM did not like the insecurity of fixed term contracts which 'puts me off' pursuing this as a career. She also felt that developing as a researcher meant 'losing clinical skills'. Time was also an issue for this group. The diabetes specialist nurse in NRCM who won a research grant, and undertook the research herself, commented:

'I was so overworked; I mean, I used to fill every weekend doing it, and this job is very hectic as well. So I think that is what happened to me, I got really overworked.'

One CNS in NRCM had been trying to set up a research study for four years, but motivation to do this dropped. She said:

'A clause should be added into contracts about doing research, and the amount of time quantified.... The clinical side is getting so busy now; I cannot take the research forward.'
Many interviewees felt that the extent of this sacrifice was under-appreciated by the NHS, colleagues and HEIs. Many felt unsupported by their managers, for example the clinical education facilitator in the PDM, who had done her PhD but was keen to undertake follow-up research, felt she was not being given adequate support from her manager:

'It's just, "Well it has got to fit in with the team, and if you can... make time, fine".'

A staff nurse in the eye hospital in the same trust had similar sentiments towards managerial attitudes:

'This puts me off doing research in this trust actually.'

The nurse in NRCM who had felt particularly unsupported with her funded project, met with the R&D manager and the nursing research coordinator and voiced her concerns:

'... I spelt it out, and said, "Look, you know, it's not on. It shouldn't happen like this, because what it did to me at that time was, it would deter me from ever doing it again", and I said, "That can't be the point of asking nurses to do research", you know, "You should encourage them, motivate them, help them to do it".'

The CNS in the same trust said of managers:

'I don't think they've got the time to really indulge me',

implying that managers see research as an indulgence. The GUM health advisor in this trust also had some bad experiences when doing her MSc with managers and some medical staff:

'Some didn't like it when I was taking time off, even though it was really in my own time. That was a bit hard to take sometimes, because if you were working really hard, and there were sarcastic comments being made, you felt a bit miserable.'

A HV in HDM felt that some of the problems were due to managerial ignorance:
"It's so hard to do it, that you can't just leave it; you can't just, sort of, hope that someone will be there to support you, because it's just not there. It's really just not there... All the managers should have a knowledge about how you do these things."

This was echoed by the training development coordinator in the same trust:

"There are times when I don't feel there is an understanding of the reality, from managers, about what this is about. They are target focused; they are focused on what the needs of the organisation are... Maintaining some form of study time is particularly difficult..."

Some felt HEIs were not aware of the strains they were under. The CPN in JAM who had to travel great distances felt that HEIs:

"... need to organise a more user-friendly form of learning"

for those who travelled great distances. The PALS manager in DNM summed up the general lack of appreciation of personal sacrifices by saying:

"I'm not sure that anybody who hasn't done it has any idea of the stress you're going through."

Summary of findings

Nurses undertaking research, NCs and lead nurses discussed individual influences that affected nursing research. It was not identified as a major theme for research managers. Three categories emerged within the theme of individual influences: motivation, attributes and personal sacrifices.

Partnerships

The fifth theme to emerge was that of partnerships. Only one group, the R&D managers, discussed this as major theme. Three categories were identified within the theme: partnerships with HEIs, multiprofessional working and other partnerships.
Partnerships with HEIs

Four dimensions were common within this category: the differing priorities of trusts and HEIs; the lack of standardisation between the NHS and HEIs; the need for liaison and joint working; and the needs of students.

The differing priorities between trusts and HEIs in the research agenda were frequently referred to by managers. PDM was served by two HEIs, one which dealt with medical education, and one with nursing and AHP education. The director of research in PDM spoke of the research priority of the first HEI as being geared to the RAE:

'(N of HEI) are moving down to about five programmes, because their medical school did so badly in the RAE, and they will based on things like neurosciences, which actually doesn’t come anywhere in the NHS priorities.'

The lack of standardisation with research processes between HEIs and trusts was also an issue. The director of research in PDM commented:

'There would be lots of duplication, if we’re not fairly careful. So we’re still working with the university to try and see how that will, how we can make sure we’ve got common systems, so that people are treated the same whichever organisation they’re working with.'

The research governance manager in the trust, who had worked within the HEI prior to taking up her temporary position in the trust, had experienced problems with data protection, for example:

'There are large data protection issues between the trust and the university. ...and, you know, making sure that we are giving out a consistent message and not contradicting each other. Because often the research is the same at both.'

She described the practical difficulties of joint research:

'I thought there’d just be an honorary contract list here, but there is no such central thing and the university had one, because I tried to cross-reference, but theirs is rather out of date and not in a very useful form…'
Comments were made about the need for more liaison and joint working, and many trusts were actively building closer links with their academic partners. For example, the head of development in HDM had already built links with the newly opened medical school:

'What we have got is them [new medical school] funding capital build in our clinical areas, with us probably chipping in some cabling and so on, supporting it, and all of our staff being able to use it. That's bigger money than we would have asked for in the teaching PCT plan. You know, you are talking about a hundred thousand [pounds].'

The trust was also involved in new innovations with the NHSU:

'The NHSU are running a Master's course in First Contact, and we are going to be the blueprint for that.'

as well as arranging with the local HEI to receive the university's satellite health research seminar broadcasts.

Others described developments in joint academic and clinical appointments. The R&D manager in DNM spoke of how a joint appointment of a reader in clinical effectiveness had been recently agreed:

'There is going to be some joint appointments, working between both, both the trust and (n of HEI), with the aim being trying to develop experiential type learning... We'll encompass research as well, to try and provide people with skills.'

Some felt they had particular problems in liaison due to individual circumstances; the R&D lead in JAM spoke of how the distance from the main university campus caused problems:

'The geographical distance from (n HEI) does mean that people don't get together as much, and I think there is a lack of understanding on both parts, really.'

The director of research in PDM described tensions with the HEI responsible for medical education, which were felt to interfere with joint working initiatives:
'I mean, much of the research that they are very keen to do - and it's very good research, very high quality [but] it doesn't fall into the immediate priorities of the NHS... So there's going to be a tension between academic colleagues and the NHS.'

However, she felt the trust had developed good links with the HEI responsible for nursing and AHPs:

'We've got very good links with (n of second HEI), actually. They're very keen to work with the trusts, and they've shared with us their research strategy and plans for the future. And we're looking at where we can link in, where we can help them, with access to clinical issues.'

The final dimension within this category was that of the needs of students. The NR coordinator in NRCM was not convinced that nurses got appropriate research education from the HEI:

'If we look at the reasons for nurses perhaps not having good research knowledge, I am not sure how straightforward that is. I think part of it is about their experience in their undergraduate training, and a lot them are critical... of their research base training at undergraduate level...'

The R&D lead in JAM spoke of difficulties that nurses doing a new Masters course had with supervision from the same university:

'The university has given us some supervisors, although that has not gone very well to date... some of the supervisors didn't seem to know that they were allocated to certain people. Some of them were difficult to get hold of... So there was a bit of a mess to start off with.'

The R&D manager in DNM thought that the needs of students could be better met via their new joint appointment posts:

'They are going to be, sort of, having an impact, hopefully, within the next couple of months, to actually, sort of, develop systems to enable people... to continually improve... and, where appropriate, engage in research projects..'

**Multiprofessional working**

The main dimensions in this category were: what was going to happen in the future, the perception that MP working was not happening at present; the
issues of medical power in MP working, communication in MP teams, and the effects that MP research would have on the future of nursing research.

The future of research was seen as inextricably tied in with multiprofessional partnerships. The director of research in the PDM could foresee that:

'Only a limited number of centres will be allowed to lead on a certain topic. One assumes they will get the big grants and then be able to take on the various professions they need to run the studies.'

The practice development nurse from the trust felt that:

'My role, then, is to, sort of, um, help people step into that multiprofessional arena.'

Some felt that there were other professional groups who would be very important in the future. For example, the R&D lead in JAM could see how social work research needed to be nurtured and incorporated into health and social care research:

'There is only one social worker who is about to undertake a research project. She is doing a Masters... I think that is going to grow.'

The R&D director in DNM wanted to see methodological biases disappear to promote MP research in the future:

'I think somehow that marriage has got to happen. I think, when it does, that there will be a lot more joint research, which will be useful.'

Some managers felt that MP research was not happening at present. The R&D manager in NRCM said:

'Rather than the nurses meeting to talk about research, they need to actually align themselves to multidisciplinary groups of people looking at research questions and research issues and capacities.'

The R&D lead in JAM commented that researchers 'tend to work separately' and the director of R&D in DNM agreed:
'I think the NHS in general doesn't actually do what it should be doing. It talks about multiprofessional, multidisciplinary, but it actually does in many instances the exact opposite.'

The issues of medical power surfaced again within this theme. In the PDM the director of research spoke of the directorate peer research support groups:

'In some of our directorates, the consultant nurse has not been allowed to be a member of the peer support group... There isn't an automatic, sort of, "opening of arms" to these people and, sort of, "Yes, we're glad you're here", you know, and, "We can learn from you"; and I think that's the old sort of medical model, isn't it? And the old politics.'

The practice development nurse in the same trust spoke of how:

'The group that we've had difficulty engaging ... has been medical staff and, you know, whatever you do to try and get them along to a meeting - whether you think of a different time, or however you like to do it - they don't tend to come.'

The NR coordinator in NRCM told of how he had difficulty in attracting medical staff to MP workshops:

'You don’t tend to get any doctors. They rarely get doctors, but I mean, I have taught doctors in the past. You tend to get a better response from the doctors, they respond if one’s made specifically for them.'

Good levels of communication were perceived as a key part of taking the MP agenda forward. The practice development nurse in PDM saw part of her role as enhancing communication:

'I am always the woman with many contacts, and many opportunities, and all the different committees.'

The R&D manager in NRCM could see that more debate about roles would help the development of MP research:

'If there is going to be a debate about what is done by the grey area people, what is done by junior doctors and what is done by a nurse, well, that is an ideal opportunity for getting a nurse and a doctor to participate in joint research.'

The NR coordinator in this trust outlined how communication could be improved:
'I think that needs to be done via R&D management meetings with, and spreading the word with, directorate managers and senior nurses.'

Difficulties in existing communication were remarked on: the R&D director in DNM stated:

'We have meetings about communication, for example. And what do governments know about communication between the different professions? And it's clear there is problem: a significant problem in the communication, which seems unbelievable, almost, really, when you think how long we've been working together.'

However, some had managed to open communication channels and overcome professional boundaries: the head of development in HDM had formed a MP research steering group, with representation from trust managers, clinicians and the local HEI providers, to develop research policy and direction. She stated:

'I am pleased with the way the core research steering group is turning out, I think. We are getting very senior people together on a regular basis, so they are coming and they are contributing, and it is shaping the way we have moved it forward.'

Several managers had thoughts on the future of NR. The practice development nurse in PDM wanted to promote NR:

'I would want to, sort of, keep a watchful eye and a critical view about what's happening on the multiprofessional agenda, and keep promoting nursing within the overall R&D picture for the trust.'

The R&D manager in DNM was worried that nurses were lacking in research experience but was hopeful for the future:

'You begin to wonder, where do nurses actually get the practical experience? Now the initiative of the education centre may be the answer to that. Er, it may provide very well-supported hands-on research training, which will, you know, enable nurses to gain those first critical bits of experience: to find out whether it is for them, and whether they want to proceed that way.'

However, some felt that NR on its own was untenable: The R&D manager in NRCM commented:
'We think that multidisciplinary teams is really the only way forward. So rather than, perhaps, nurses trying to do, um, you know, nursing research on their own, that they align themselves to a team of a specialism area.'

The NR coordinator in this trust agreed:

'I don't think it should be just about nursing. I think just to go down the nursing road would be wrong.'

**Other partnerships**

The final category in this theme was that of other partnerships. Managers in two trusts spoke of the input from other resources and charities.

The R&D manager in PDM spoke of charitable funds:

'In terms of support for nursing research, we've got things like the non-medical research committee, so there is a funding source, obviously that's a charitable trustee'

However, the R&D director in this trust commented that:

'Our charitable funds have been reduced tremendously in recent years... Now they can only use the money that's been identified and bequeathed for certain causes... But whole other areas of research that are really important, particularly if you look at things like care of the elderly, there's no money been bequeathed for that purpose.'

Finally in this trust, the research governance manager was trying to work in partnership with other NHS trusts in the locality, to promote good practice and share information and resources for research governance:

'I have been to (n of another trust) and I have been to (n of second trust) and kept in contact with them. And had conversations about implementation and people, vaguely, with (n of 2 people) at (third trust); um, and shared these leaflets with them.'

The other trust to mention other resources was HDM. The head of development discussed other partners who were possible sources of funding, due to the fact that it was a newly-created teaching PCT. The Department of Health:
'... identify with the Workforce Development Confederation the fact that we are a teaching PCT and... they are therefore expected to support teaching PCT priorities... The most effective way I can see the teaching PCT working, is to build a decent infrastructure, so that people will do, will be asking for more money for bids and proposals. We work with the learning skills council, and they have got money. You go to the (n of medical school) and they have got money; the deanery have got money, the WDC have got money... Most of my time now will be spent working with the partner organisations, projects that they want us to set up... and it's big money...'

**Summary**

The fifth theme to emerge was that of partnerships. This theme emerged in the R&D managers group. Three categories were identified within this theme: partnerships with HEIs, multiprofessional working and other partnerships.

**Role Achievement**

The final theme of role achievement was also only identified for one group: the NCs. It can be speculated that this theme emerged due to the fact that the NC role is comparatively new, and when interviewed, most NCs had been in post three years or less, so were often in the early stages of defining their roles and responsibilities and were keen to talk about their experiences. Detailed analysis of the NC role has been reported elsewhere (Woodward et al. 2005a 2005b) but the research aspects are reported here. One category was relevant: that of role development.

**Role development**

Dimensions of this category relevant to research were whether there was integration or non-integration of the four domains of the role and the evolution of the role.
NCs who were successfully undertaking all four domains of the role felt the integration of the domains ensured a seamless approach to the role and enhanced the research requirements of their job. For example, the NC in critical care in PDM stated:

'I was a director of nursing education and professional development... and I helped them institute shared governance as a model...Taking that even further, widening that, research empowers the discipline of nursing and powers the profession. So I see all of that as married.'

Non-integration. NCs who felt they had not integrated the four domains well often complained of overload of work and withdrawal from R&D activities. One NC in A&E MH liaison, stated:

'We're not fully complement of staff yet... I've had to withdraw from other activities'.

Evolution of the role was also seen as affecting research activity: the NC for stroke care in NRCM had been developing services before thinking about research:

'I'm just at the threshold, now, of research proper.'

Summary

Nurse consultants identified role achievement as a theme. One category emerged which was relevant to research: that of role development.

Summary of results by theme

Analysis of the data was done by group of interviewees, to identify themes emerging within each group. Thematic frameworks were compiled for each group. As the analysis progressed, it became apparent that many of the themes that emerged were shared by some or all of the groups. In the light of
these findings, a common thematic framework was complied and findings presented in section two by theme. Particular group differences were reported within each theme. The results from this chapter will now be discussed, and recommendations for policy and practice made, in Chapter 8.
CHAPTER 8. DISCUSSION, RECOMMENDATIONS AND CONCLUSIONS OF PHASE 2.

Introduction

Chapter 7 presented the results from Phase 2 of the research. These will now be discussed analytically with reference to the literature. Implications of the similarity of findings between organisations, the refocusing of the research and the development of a common thematic framework are discussed. A global model of factors which influence nursing research activity in the NHS is proposed. These factors and their influence on nursing research and knowledge generation are then discussed to justify and illuminate the development of this model. To conclude, implications for nursing knowledge generation are summarised and recommendations for practice and policy made.

Objectives of the study

In order to discuss the outcomes of Phase 2 of the study, the specific research objectives for this phase (as previously outlined in the Introduction to this thesis) will be reviewed as to whether or not they have been achieved. These were:

- To undertake in-depth profiles of organisational support and the management of nursing research
- To identify organisational models of how nursing research was managed and supported
- To explore whether these organisational models impacted on nursing research activity
- To identify factors influencing NR activity in the clinical setting
• To analyse the perceptions and experiences of nurses undertaking nursing research in the clinical setting
• To consider the impact of findings for nursing knowledge generation.

These will be considered in relevant parts of the discussion.

**Implications of findings for the progress of the research**

The findings influenced the progress of the research. The first two research objectives were achieved, as seen in Chapter 7: profiles of organisations were constructed and management support outlined. From these profiles, three models of support were constructed for the five organisations, which were strongly related to the size and nature of the organisation. Le May et al. (1998) investigated the research cultures of nurses and managers: managers found the nature of the organisation was very influential, with smaller, non-teaching organizations such as mental health and community trusts seen as 'Cinderella' disciplines with special problems, with research not being a strong part of the culture. However, this was not reflected in the present study: despite the different approaches taken to support NR that took account of the size and nature of the organisation, research cultures did exist and were developing rapidly.

When further detailed analysis was undertaken of interview data, it was found that perceptions and experiences of staff in all trusts could be classified in six main themes, and that individual models of support did not lead to the emergence of greatly differing themes. Rather, considerable overlap was present which allowed for the development of a common thematic framework. These findings led to a slight shift
of focus in the research: in addition to identifying models of organisational support, other factors had to be identified that also had an impact on NR activity as it was clear from the emerging themes that these were varied and complex and not entirely dependent on which model was used.

Several factors were identified that had an impact on NR activity in addition to the organisational model of support. It can therefore be seen that the third and fourth objectives, to explore whether or not organisational models impacted on NR activity and to identify factors influencing NR activity, were also achieved. Models of support did have an impact, but this was one of several factors identified and therefore the model was not the overriding influence, but merely one of many. All of these aspects will now be discussed in greater depth, and the impact of the findings for nursing knowledge generation will be considered in order to achieve the final research objective.

**Construction of a global model of factors influencing nursing research activity**

As seen in Chapter 7, data analysis led to the identification of six major themes, all of which were identified for each trust. However, differing groups of staff within trusts identified different themes. Two themes were common to all four groups of staff interviewed: perceptions of nursing research and NHS influences. Two themes were common to several (support systems and individual influences), whilst the remaining two (partnerships, roles) were identified by individual groups (see page 222). Five of the six themes represented factors influencing nursing research activity generally. One theme about role achievement was unique to NCs and not transferable to the model; it was a reflection of the newness of the role so has not been incorporated.
The influences of this particular theme on NCs have been reported elsewhere (Woodward et al, 2005a, 2005b in press).

The identified themes can all influence NR activity in varying ways. By constructing a common thematic framework (see Table 7.9 pages 223-225), it was possible to look at the five trusts overall, in addition to studying separate groups in each trust. In this way, it was possible to construct a global model of factors influencing NR activity.

The proposed model is demonstrated by a visual interpretation of the inter-relation of five factors and how they impact on nursing research activity in Figure 8.1 below.

**Figure 8.1 Global model of factors influencing nursing research activity in the NHS**
The discussion will focus on the relationships between these factors in order to clarify the model and analyse how NR activity is affected by these factors and how the individual factors inter-relate.

Perceptions of nursing research and nursing research activity

Perceptions of NR

The literature reviewed concurred with many of the findings about perceptions of NR. Medicine and the NHS classifies evidence in a hierarchy (Muir-Gray 1997) which regards quantitative methods of research, in particular meta-analyses of experimental research, and experimental research itself, as at the top of this hierarchy, with an associated tendency to focus on such experimental research in the NHS (Bowling, 1997). Qualitative research is placed low in the order of evidence: this was seen by Gupta (2003) as providing an inherent bias as to the value of qualitative research in the eyes of the NHS as a whole, whilst Walker (1994) referred to opportunities for NR being undermined by traditional scientific methods. Kirby (2004) documents how pioneer nurse researchers had to work in an atmosphere of suspicion from within the profession, and with little regard from more established professions.

Nursing research is generally very varied in design (Bowling 1997), with less concentration on experimental work as the primary 'gold standard' research design, and more on survey-type methods and qualitative designs which look at the perceptions and views of individuals and groups (and, as Pope and Mays (1993) point out, an over-reliance on any one method can lead to very limited understanding of the topic of interest). Hicks and Hennessy (1997) suggested a more eclectic approach to EBP with more attention to qualitative methodologies at both funding and
dissemination stages. Newman (1994) Rolfe (1998) and Maggs (1997) also argued that positivistic or reductionist approaches, as favoured by the proponents of a hierarchy of evidence, are not in nursing's best interests in view of the practice-base of the profession, which they see as lending itself more to practice-based interpretive or critical approaches.

However, despite this recognition by some health services researchers of the need for a diversity of research design for health services research, in the present study difficulties faced by nurse researchers due to the low profile of nursing research and its impact on NR activity were highlighted. This low profile affected NR in a number of ways: there was a comparatively low level of NR. This was a factor also discussed by Rafferty (DoH 2000a), who commented on low numbers of nurse researchers considering the total number of nurses working in the NHS, especially in comparison to numbers of medical staff. Nurses were perceived as often lacking in confidence about their ability to undertake or understand research, and as having difficulty with the research process. This was also recognised by Clifford and Murray (2001): participants in their study also felt that lack of knowledge about undertaking research was a problem, whilst Mulhall (1995) commented on nurses' lack of research experience.

In the present study, nurses who could act as mentors to those undertaking NR were seen as few and far between, due to a lack of capacity and capability, and the relatively recent advent of nurses undertaking higher degrees which would prepare them for this role. This was also reflected in the literature: Tanner and Hale (2002b) reported that facilitation was the most important factor in getting nurses to publish.
Sarre (2003), Campbell et al (2002) and Jinks and Green (2004) all documented a lack of capacity and capability of experienced nurse researchers, which impacted on NR activity and support for NR. This has now been recognised nationally and the literature review also documented the national progress towards increasing capacity and capability via dedicated funding streams (HEFCE 2002, NCCSDO 2003) in an attempt to rectify the problem.

These concerns also give rise to questions as to how nursing research could improve its reputation and be accepted as an equally viable, but often very different, approach to enquiry in the NHS, in order to attract appropriate levels of approval and funding not only to undertake research but also to use results in practice. Mulhall (1999a) argues that this change will only occur through:

- A framework that incorporates a more sophisticated awareness of how the social structure of the NHS affects change
- A clearer statement of the evidence that nursing needs for effective practice
- A strategy and context that provides nurses and nursing with adequate resources to effect change (page 167).

Others see it as linked to gender issues (Walker 1994, Bradshaw 2001), whilst Hicks (1999) found that gender and research were inextricably linked, with empirical research hierarchies being embedded in masculinity; this could also affect how NR is viewed and treated. She viewed the prospective picture for NR as ‘bleak’ if top-level management roles continue to be occupied by men, with a restricted body of nurse researchers who reflect the world of male management and experimentation (p138).

*Ethics processes*
Ethics processes were often seen as lengthy and difficult, with a lack of representation on committees of researchers with a qualitative background – even an REC committee member commented on committee biases in favour of experimental research and RCTs, which were potentially far more dangerous to patients, whilst ignoring the fact that qualitative research, although it has limitations, does not have the same potential for physical harm. This calls into question the basis on which committee members are selected and reimbursed. All members are volunteers, and serve a four-year term; they are reimbursed only with expenses (DoH 2005a). LRECs have been described as ‘parochial’ and strongly influenced locally by particular research environments, with membership reflecting a narrow spectrum of society (DoH 2005a p4).

With the variety of health services research methods now in use, it would seem logical for committee members to represent a cross-section of disciplines and researchers with expertise in a variety of paradigms to try and eliminate unnecessary bias and trauma and reduce time delays for potential researchers. The particular difficulties faced by researchers in two of the organisations studied reflect the above criticisms from the DoH report (2005a), which, as reviewed in Chapter 5, is advising changes to the system to try and address some of the issues identified by participants in the present study.

**Funding issues**

Nurses were also viewed as having difficulty in attracting research funding. Funding issues were helped in one large, research-orientated trust (PDM) in the present study by splitting charitable trustee funds for research into two - medical and non-medical -
with the view that NR would not be able to compete with medical research if all applications went to one committee. This was regarded as vital to enable non-medical research to survive. This notion of ring-fencing money for nursing research has been debated over the years, on a national basis. The Nursing Research Taskforce (DoH 1993b) identified particular needs, such as investing in research education and training, identifying an enhanced range of sources and types of funding for research, and improving dissemination and implementation of R&D findings; but it concluded that nursing should not be made a special case. However, as seen in the literature review, this policy has now been reversed for a limited period, with specific funding streams for nurses and AHPs being made available to increase research capacity and capability, which have been recognised as inadequate (HEFCE 2001, NCCSDO 2003).

Long-term results of this policy have yet to be seen, but comparisons have been made to the USA, where the National Institute of Nursing Research (NINR) has advanced NR training, capacity and capability (Tiemey 1998, Thompson 2000 McCormack 2004b). However, this does not amount to the setting up of a permanent Nursing Research Council in the UK (see Rafferty et al. 2000a for a fuller debate of the advantages and disadvantages of such a move). Comparisons with other disciplines have been made: a Research Council for the Social Sciences was set up in the 1960s (now the Economic and Social Research Council), and by the mid-1980s funding for social science had exceeded £100 million (Bulmer 1987). Calls for reform of the MRC have also been made: Mulhall (1995) accused the MRC of putting up difficulties for nurse researchers seeking funds. Some reforms have since occurred, with the MRC earmarking funding schemes for certain fields, such as
primary care and public health, in addition to existing bio-medical sciences (Rafferty et al. 2000a), largely as a result of the Mant report (DoH 1997b).

It is to be hoped that the time-limited nature of this initiative does not merely provide a short period of growth that is followed by further problems in NR development. Research is an expensive activity and a coordinated strategy for the longer-term is vital. All health departments in the countries of the United Kingdom with the exception of England seem to have recognised this with the development of national NR strategies (Bellman 2005). It remains to be seen whether England will also develop one.

**Traditions and the medical power base**

The concept of tradition was also identified. The most commonly-discussed aspect was the perceived medical power base of the NHS. Traditions of medical dominance were mentioned, which some still felt to be ongoing - especially in larger secondary care trusts. Some managers in these trusts commented on medical reluctance to enter into multiprofessional learning activities and, although the multiprofessional research agenda was regarded as inevitable, some felt that it was not happening at the current time due to power issues. Nurses were seen as vulnerable and in need of nurturing by many managers, but some also recognised that nurses would learn and gain skills in research by aligning themselves with teams of multiprofessional researchers in specialist areas. Nurses stated that they were not being named in publications of medical research, even when they had a large input to projects, and the perceived bias from funding organisations towards medical research was again a factor here.
These shortcomings have been documented by others. Rodgers (1998) commented on the under-resourcing of nursing projects and large-scale, multi-centre post-doctoral nursing research. Le May et al. (1998) reported nurses' perceptions of medical staff as blocking research implementation and seeing NR as substandard. Mulhall (1999b) stated that nursing had become subordinate not only to doctors but also now to management since the Griffiths report (NHS Management Enquiry 1983) removed nurses from key management teams, whilst Funk et al. (1991), Lacey (1994) and Rodgers (1994) identified doctors and managers as blocking nurses' efforts at instigating research-based practice. Doctors as a group have been regarded by some as antagonistic due to a perceived threat to the social order (Bradshaw 2001).

However, Albarran and Scholes (2005) commented recently that journals are becoming more scrupulous and that those collecting data or specimens may now be acknowledged. This may help by providing recognition for nurses involved in the research process.

This dominant power base was seen to impact by reinforcing negative images of NR and suppressing NR development and innovation: one manager in the present study referred to nurses not being 'canny' enough and not therefore 'playing the system' to get support and financial help. For example, some NCs saw doctors as supportive if they undertook roles that eased doctors' workloads; this has also been reported by Radcliffe (2000). The medical profession is still seen by many to be dominant in general in the NHS (Witz 1992, Mulhall 1999a, Coombs 2004), although Mulhall notes a gradual decline in this.
When looking at the traditions of medical research funding, the historical perspective helps clarify how this notion of research dominance has evolved. Medical education has been within higher education for many years; the main university teaching hospital centres date from the 19th century and so their associated research activities developed and became established very early on. The government established the MRC in 1913, and many medical charities, such as the British Heart Foundation, have traditionally funded medical research (Shaw and Clifford, 2004). Such dedicated research support and funding was not deemed necessary for other healthcare professions, who had an apprenticeship-style training based within the NHS until well into the latter half of the 20th century. Some still believe that, based on historical precedent, the nursing knowledge base would not develop if a generic R&D agenda was adopted (Bishop 2004).

Interestingly, participants from the newer, smaller organisations, especially JAM, made far fewer comments about the medical power base – within JAM it was not identified as a major factor in any of the groups seen. Reasons for this can be speculated upon, but in the mental health field it may be that nurses have developed more autonomy. Also there are more male nurses and mental health teams are very diverse, with large inputs from social care workers, psychologists, occupational therapists, nurses and doctors who work closely together and often provide the same interventions (for example, cognitive behavioural therapy is undertaken by nurses, psychologists, therapists and doctors) (DoH 1999f). This lack of mention could also have been due to the influence of the DoN, who was also the trust’s director of research and held a joint academic appointment, therefore providing much of the
supervision and support to individuals. The fact that a senior nurse was heading up these research processes may have given positive messages about the value and place of nursing and NR within the organisation. Similarly, strong leadership was seen as vital by Maggs (1997) and Jinks and Green (2004) in promoting an effective culture.

However, changes to traditional patterns were emerging in most trusts, with the appointment of NCs and joint appointments with HEIs of RPs and lecturers/CNSs. These nurses had a remit to undertake research within practice and many were challenging long-held notions of power and dominance, empowering nurses and producing research outputs. The research managers and lead nurses interviewed generally saw these nurses as key in taking research forward and wanted to nurture and encourage them, but equally recognised that not all nurses either want or need to engage in primary research. It was recognised that these nurses were ideally placed to contribute to much of the current NHS research agenda of service delivery and organisation evaluation, being skilled in the type of research methods needed for this type of enquiry. Whether or not this actually transfers to research practice on a large scale remains to be seen.

These new roles may help to remove some ingrained traditions of subservience that have developed since Nightingale recommended nurses to use their 'feminine wiles' in the 19th century to overcome medical resistance (Webb 2002 p557). Lawler (1997) claimed that nurses still use subversive tactics in the face of medical and managerial power. Others, however, have found that whilst deference to doctors from the Nightingale era remains influential, nurses are becoming more assertive in their
relationships with male medical colleagues (Porter 1992). Similarly, Stein, re-examining the 'doctor-nurse game' over 20 years after his first paper (Stein 1967, Stein et al. 1990), found that nurses had changed the way they related to other healthcare professionals, were tired of the handmaiden image, and were more assertive. The addition of assertive, empowering expert practitioners in new roles, undertaking a full range of professional activity to include research, should further enhance this transition (Woodward et al. 2005a).

Other perceived traditions included NR being seen as done mostly by academics, and NR not being expected or encouraged from clinicians within the NHS. It was seen as linked to awards, rather than being done to improve services or care, and nurses were seen as data collectors for others. Similar findings were reported by Kuuppelomaki and Tuomi (2003): much of the NR in their study was for academic courses, and only 10% of researchers had carried out research purely for practice development. More nurses are now doing higher degrees with a research component — in the five years to 1998-99 postgraduate student numbers in nursing increased by 57%, the highest of any discipline (Rafferty et al 2004a). Major (2000) reported figures from The Higher Education Statistics Agency showing that the biggest percentage increase in female postgraduates was in subjects allied to medicine; this was up 22% on the previous year. This trend is continuing, with increasing numbers of Master’s programmes emerging in HEIs as a result of demands from practice. For example, new advanced practice roles have been introduced that recommend education to this level (such as NCs, where government recommendations were that they should be educated 'up to or beyond Master’s degree level') (DoH 1999b page 8). Bryar (2003) found clinicians more likely to go on to study at postgraduate level if
introduced to research in a supported environment, whilst Adamsen et al. (2003) found that 89% of nurses who had done a research methods course were active in planning their own research compared with 35.7% of those who had not done the course. Thus, the potential is there to gradually break down these barriers and achieve positive changes in the way NR is viewed and supported.

**Culture**

Cultural aspects were frequently mentioned in the study, with nurses seen as frightened of research, not understanding it, guilty about doing it and the general notion being that nurses feel they should be 'hands-on' rather than researchers. Nurses frequently reported feelings of guilt when undertaking research. These barriers to research have been frequently observed in the literature. For example, Davies et al (2002) found barriers such as lack of time, resources and support. Le May et al. (1998) found that, whilst nurses were worried and anxious about research, they saw it as related to the nature and standard of care they delivered. Managers, however, saw NR as a luxury, but important in enhancing the organisation's reputation. Clifford and Murray (2001) identified four similar categories (lack of time, support, research facilities and research knowledge) as key factors affecting project development. Kuuppelomaki and Tuomi (2003) in Finland reported that undertaking research was not seen as a job requirement, and was problematic due to a lack of time, skills and interest, with a perceived lack of benefit for practice. Others report the difficulty of understanding research: Peters (1992) and Rodgers (1994) found that much research is written in a manner that makes it difficult to understand. This was also identified by Hunt (1996), who undertook much of the early work in the UK on the lack of research utilisation amongst nurses (Hunt 1981); she identified similar
barriers, such as nurses not knowing about research, not understanding it, not believing research findings, not knowing how to use research findings and not being allowed to use them.

Other barriers influencing the research-practice gap are well-documented: Malby (1996) identified resistance to change as the main difficulty to overcome. This was also acknowledged by MacGuire (1990) and Hunt (1987), who encountered resistance to change when trying to implement research-based practice with regard to pre-operative fasting. It is to be hoped that, as more nurses develop research and critical appraisal skills, these problems will lessen: Adamsen et al. (2003) found that 86% of nurses who had undertaken a research methods course were able to find time during working hours to participate in research, compared to 50% who had not attended the course. Stevens (1997) noted that, whilst historically an apathy and unwillingness of nurses to participate in research activity were reported, more recent studies had demonstrated favourable attitudes towards research.

The modernisation policies of the Labour government have attempted to address this, in part due to problems exposed in the medical profession, notably those at Bristol (Bristol Royal Infirmary Inquiry 2001) and Alder Hey (DoH 2001e). The introduction of the quality agenda via clinical governance, the setting up of NICE, NSFs, the emphasis on EBP, research governance and the increasing availability of in-house courses via RDSUs on research appreciation and utilisation, are attempts to formalise responsibility and accountability in practice and research and enable all healthcare professionals to understand and use research and evidence in practice (DoH 1997a, 1998a). However, the continued emphasis on hierarchies and 'gold standards' of
Evidence do little to remove some of the cultural barriers to NR activity, with its wide-rangi

ing, broad, eclectic nature.

Organisational culture was also mentioned in the present study, and the NHS was gener

gally seen as service- and target-driven, with a lack of research culture. The impli

cations of this for NR can be seen in what one lead nurse in HDM described as a 

‘backlash’ against nursing being an academic profession. Evidence of this has been seen both within the profession and in the national media: Dispatches (2005), a Channel 4 television programme screened on 31/1/05, exposed poor practices in two NHS organisations, but discussions focused on nurses being ‘too posh to wash’, the assertion being that university education has encouraged them to believe that they are ‘above fundamental nursing care’ (Chatterjee, 2005 p 3, Nursing Times editorial 2005 p15). This view was, however, rebuffed by the popular nursing press, who described it as ‘complete nonsense’ (Nursing Times editorial board 2005 p15) and ascribed it to cultural practices such as a lack of assertiveness in challenging poor practices, poor leadership and substandard NHS conditions. In defending nurses, however, the nursing press chose not to consider the impact of recent leadership initiatives such as the DoH Leading Empowered Organisations (LEO) programme (DoH 2005e) or CG systems now in place for dealing with poor practice.

The question remains, however, why poor practice leads to these allegations for the nursing profession, whereas when poor or dangerous medical practices are highlighted it is never speculated that these are due to their university education. Rather, the blame is put directly on individuals or poor organisational practices, for example the Shipman murders (The Shipman Inquiry website 2005), Alder Hey organ
retention crisis (Department of Health 2001e) (in which, ironically, organs were primarily retained for research and/or educational purposes) and the Bristol babies heart tragedy (Bristol Royal Infirmary Inquiry 2001). Academic backlash does not appear to be an issue here, but nursing is still struggling for recognition as an academic discipline. The Peach report (UKCC 1999) did much to dispel myths about 'fitness to practice', following on from a similar backlash in the mid-1990s after the incorporation of nursing education into HEIs, and was cautiously optimistic about the future of nursing education in higher education. However, these current issues serve to highlight the fragile position of nursing within the tertiary education sector and the need for it to firmly establish itself not only as a recognised academic discipline with a track record of high quality research, but also as one that is seen to produce practitioners who are fit for purpose.

**Opportunities**

Aspects of the research process and opportunities for research were frequently mentioned, such as applications for Master's courses and funding. There was no standard application process, and this varied both between and within trusts. Nurses were often unaware or confused about the processes, with the result that many self-funded part of their course fees, paid associated research costs and/or did the research in their own time. In one trust, all nurses seen who had undertaken Master's awards were senior managers. Watson (2005) suggested that NHS funding bodies clearly do not value research, and he described their attitudes as 'hostile' (p661). Draper (2004) reported that WDCs had plans to exclude from funding Master's programmes with great weight given to research and a dissertation. Through the life of the present study, however, more opportunities for M-level study for all grades
were appearing in all trusts, and funding streams for these programmes were becoming more available as WDCs were identifying local need.

However, in some HEIs the opportunity to undertake research within these programmes was disappearing; this was supported by a few research managers, who felt that student projects were not feasible within given time limits or were of limited value to practice. Rafferty and Traynor (1999) reported on how the modernisation of R&D has the potential to stifle clinical autonomy and creativity, with an increase in large-scale research projects and a reduction in funding for small-scale individual projects. However, this was seen by Thompson (2000) as beneficial in removing unreplicated and ungeneralisable studies and reducing a lack of focus. The policy of encouraging researchers to focus on distinctive, coherent programmes of research may prove to be a severe disadvantage to nurses wishing to develop basic research skills, especially if more HEIs exclude primary research as a requirement. Meerabeau et al. (2004) stated that withdrawal of primary research requirements in Master’s programmes would make it difficult for practitioners to develop research skills.

Robinson (1999) described how one trust developed an initiative to encourage NR: funding for projects was provided and the initiative led to the development of over 20 projects. This may be one way forward, but it would need strong, ongoing organisational commitment.

Nurses in this research who were studying for awards often felt there was an imbalance between managers’ willingness to allow them time off to attend taught days and their willingness to allow a similar time off for the research component. Even where time was given, it often resulted in the same workload being squeezed into four
days instead of five. Hicks (1995a) found that nurse researchers were perceived as not good clinicians by managers, and their attitudes to researchers may be a reflection of this. Meyer et al. (2003) reported the stresses amongst R&D lead nurses of trying to undertake research, which were frustrating and stressful to the extent of affecting their health and well-being, with only one out of the seven remaining in post.

These factors can be seen to impact on NR activity via a potential decrease in research for some Master's students and a reluctance by clinicians to undertake further research, having experienced problems with time, resources or workload. Although clinical nursing research has a golden opportunity to increase as more nurses undertake higher degrees in advanced practice and more joint clinical/research/academic posts are created, the potential for this is fragile and could be undermined if key issues such as processes and opportunity are not addressed by NHS organisations. McCormack (2004b) believes that one way to address the vulnerability of NR is through the development of centres of excellence, but Williamson (2004) disagrees and feels that this would be excluding for practitioners, who would rather develop close ties with local researchers.

The StLaR report (Butterworth et al. 2005) has looked at many of these issues and recommended a flexible approach to careers that would allow practitioners to move between sectors, with no detrimental effects on pensions and working conditions. They also recommended investments through the Multiprofessional Education and Training levy and Skills for Business networks to ensure that the workforce is appropriately qualified and supported to obtain the necessary knowledge and skills. Proposals are being considered at the current time with regard to how best to take the
report forward, but the recommendations address many pertinent issues for nurse researchers.

**Dissemination of research**

When asked about dissemination of research findings, most nurses were prepared to present results locally within their workplace. However, more widespread dissemination via national conferences or publication was far less likely to occur due to a variety of reasons such as time, burnout, lack of knowledge about publishing and/or bad experiences of trying to get research published. Most nurses who were in the middle of, or planning, research voiced an interest in publishing their results, but this did not translate into reality for those that had completed their studies. It could well be that those who were still doing the research felt an obligation to state that they were going to publish, and said what they thought the interviewer would be expecting to hear or what they thought would be expected of them by their trusts. However, comments from those who had completed their research seemed to indicate that they too had thought about publication, wished they had done it, but had under-estimated the effort and resources needed or felt that they were too traumatised to revisit the work immediately; by the time they were able to do so, the work was often seen as out of date. Those most likely to disseminate nationally were those with or doing doctorates or those in joint clinical/academic appointments where this was expected by the HEI.

This lack of dissemination was also reported by Malby (1996) in an audit of research activity by nurses and AHPs in one regional health authority. Poor publication records by nurses have also been documented by Hicks (1995b) and Kuuppelomaki and
Tuomi (2003); nurses who had undertaken research in those studies rarely published their findings in journals. Reasons were suggested to be lack of confidence, time and/or support.

The impact of this on nursing research is huge. Undisseminated research does not contribute to the knowledge base of the profession and is not used, other than locally, to inform practice. Practitioners therefore remain uninformed and are not aware of recent research findings. Not to publish research could be viewed as 'a form of scientific misconduct' (Winslow 1996, p171). Some R&D managers attributed lack of dissemination to time issues, but there seem to be other more complex and personal factors emerging: comments from nurses themselves revolved more around the traumas experienced when doing the work, along with a lack of support to gain relevant writing or presentational skills, and publication not being seen as a necessary output in the same way that it is expected of doctors (unless the researcher also worked in higher education). The issues of why nurses have 'scars' or feel burnt out after doing a research project for a Master's award, and are thus unable to look at their work after they complete, need to be examined, along with how they can be supported to write and disseminate on a wider basis.

Bishop (2004) stressed the importance of getting work published in order to move research from 'paper to practice' (p168), and gave advice on how to achieve this, but recognised that report-writing can be not only difficult but also politically problematic if findings are not welcomed by managers or funders. Books and courses are available on writing for publication; for example the RCN annual international research conference frequently runs workshops on this and some RDSUs will also provide
advice on writing for publication. Supervisors of Master's students also have a large role to play: structured support and help could be provided to develop joint papers after the research is completed, which would also benefit academics if it contributed to the RAE.

Heinrich et al. (2004) question why novice writers should be expected to write for publication without being taught how, and state that scholarly writing tops the list of students' greatest fears about graduate study. They recommend that 'writing for publication' workshops should be incorporated into HEI graduate programmes, with students working on their own papers in a supportive environment. McVeigh et al. (2002) recommended publishing syndicates to support publication and increase quality of papers. This was also recommended by Price (2001), who identified the need for group publication in health care. These methods all provide supportive means to learn writing skills, develop papers, have them peer-reviewed before submission, and to increase output and quality. This process could be incorporated into the journal clubs that met in some of the trusts in the present study.

Organisational support has been recognised as a major factor in achieving the dissemination and utilisation of research findings. Closs and Cheater (1994) concluded that a positive research culture, with interest and support, was needed, while Hicks (1995a) found that nurse managers considered being a good researcher fundamentally incompatible with being a good nurse. She concluded that nursing research will not progress until managers' attitudes to nursing research change.

Much has been written about getting research into practice and many projects have been undertaken to enhance this. Examples include the Conduct and Utilisation of
Research in Nursing (CURN) project (Michigan Nurses Association 1983), and the Getting Research into Purchasing and Practice (GriPP) project introduced by Anglia and Oxford Regional Health Authority in 1993 to focus on interventions for which there was good research evidence of effectiveness, but where a gap existed between this evidence and what was done in practice (Anglia and Oxford Regional Health Authority 1994). The Framework for Appropriate Care Throughout Sheffield (FACTS) project commenced in 1994, concentrating on GP practices and aiming to change behaviour so that it became more evidence-based (Eve 1995). Papers by Funk et al (1991), Closs and Cheater (1994) and French (1999) also look at dissemination and/or utilisation of research. However, there seems to be far less examination of why, when research is undertaken, nurses choose not to disseminate their findings to the wider audience. Ultimately, this is costly to individual researchers, the profession as a whole, recipients of care and the NHS. Whilst many pieces of research conducted as part of university awards are necessarily small-scale, it seems as though some good quality, relevant clinical nursing research is destined to end up on the shelves of the reference sections of HEI libraries gathering dust when it may have the potential for local application at least.

Clinical trials research nurses

The final area to emerge in the analysis of perceptions of NR was the role of CTRNs and their potential for undertaking NR. Managers in the two largest secondary care trusts were concerned with this, and in one trust it was felt that they were often under-used, under-developed, difficult to monitor and unsupported. Little UK literature is available on the role of the CTRN (Raja-Jones 2002, Stephens-Lloyd 2004), and Raja-Jones (2002) found no empirical data examining this. Stephens-Lloyd (2004)
stated that these practitioners are seen as isolated and often marginalised and often viewed as 'data collectors'. McCormack (2004a) attributed this partly to the fact that historically CTRNs worked in direct line management of principal investigators and were outside a nursing framework, usually on fixed term contracts outside of the NHS. He recommended that they should be within a nursing governance structure, be part of a nursing team, and be managed directly by nurses, in collaboration with principal investigators. Research governance arrangements (DoH 2001a) may help address this as more NHS organisations insist that all research staff hold honorary contracts with the organisation.

One trust (PDM) had set up a dedicated committee for these practitioners to address some of these issues. The other (NRCM) was developing nursing research skills in some of the CTRNs to try and meet the needs of service users and evaluate care. For example, in the oncology department several newly-appointed CTRNs had half a day per week built into their contracts for NR activity, and this was funded by the government as part of their role as cancer research nurses. Both McCormack (2004a) and Stephens-Lloyd (2004) saw the potential for this, with Stephens-Lloyd (2004) viewing CTRNs as having a wide range of skills and able to develop high autonomy and decision-making skills, and gain academic, financial, managerial and administrative experience. Raja-Jones (2002) likened the role to that of a clinical nurse specialist for similar reasons. McCormack (2004a), however, warned that research careers require specific academic preparation, systematic supervision and in development and support activities built in: expertise in specific research techniques is not the same as developing research methodological expertise.
With support, this model could be used as a way of building on the research capacity of nurses within trusts, enabling evaluative research or research on user perspectives to be carried out and so meeting the government agenda for SDO research and user involvement in research, as well as simultaneously boosting NR capacity and developing individual practitioners. The development of clinical careers for researchers, as envisaged by the StLaR report (Butterworth et al. 2005), might also help clarify role development, educational provision and role definition for this group.

NHS influences and nursing research activity

NHS influences have impacted on NR in many ways over the last decade. Current NHS policy and the modernisation agenda has been key in shaping the nature of the NHS research and, as reviewed in Chapter 1, R&D funding was reorganised by the Conservative government of the mid-1990s with the Culyer report (DoH 1994a). The election of the Labour government in 1997, known colloquially as 'New Labour', saw the development of a different approach to policy known as the 'third way' (Giddens 1998). This followed 18 years of Conservative policy concerned more with treating the NHS as a business rather than a public service and emphasising individual responsibility for health, with the introduction of the purchaser/provider split (DoH 1990). There was lack of acknowledgement of the effects on health of poverty and social exclusion, but this was later re-established by the Labour government following the Acheson Report (DoH 1998b). Labour came into office in 1997 on a manifesto of public service reform, with associated expenditure and modernisation, and very quickly embarked on this, as seen in Chapter 5.

Clinical effectiveness
Clinical effectiveness and research governance policies have had an impact on all research, with a more structured approach to the process of approving and monitoring projects. Some trusts in the present study felt penalised by their allocated funding under these new arrangements, and comments were made on the loss of regional bursaries and small project grants as being detrimental, especially to new researchers and non-medical research. Most had interpreted policy and produced their own R&D strategy documents or were in the process of doing so at the time of data collection. One did not have such a document but was planning to produce it.

Only two trusts had a specific NR strategy, but these were both brief statements that were part of the overall nursing strategy. Other organisations saw this as unnecessary in light of the existence of an overall trust R&D policy, together with the government agenda for multiprofessional research (DoH 1993b, Thompson and Watson 2004). The advantage of a single policy was seen as providing a unified strategy for all disciplines, which concentrated on organisational and wider NHS research needs (DoH 1993b). However, disadvantages include the potential for nursing research to be subsumed or ignored, due to factors already debated about traditions and power, and a lack of direction or specific information for nurses new to research. Thompson and Watson (2004) believed that multidisciplinarity influenced NR funding and the possibility of nursing setting its own research agenda. The recent reversal of policy, with specific funding streams for NR and AHP research (HEFCE 2001, NCCSDO 2003), may lead to organisations more developing detailed research strategies for nurses and AHPs, but at the time of data collection this was not the case in any of the trusts.
Within the CE framework, policy regarding evaluation of healthcare has meant increasing amounts of audit and evaluation activity within trusts. Managers and lead nurses saw this as beneficial for nurses as offering an introduction to the research process with a structured approach, experience of collecting data and reviewing the results. There has been much discussion about the relationship between audit and research. Cheater and Closs (1998) describe audit as a systematic process similar to and linked with research, requiring a clearly defined question, identification of measurable criteria and target standards, collection and analysis of data, measurement of performance against standards, implementation of change followed by re-audit. They see research as a similar process, with the main difference being that research aims to generate theory and is generalisable to the wider population. Some have suggested that audit is a form of research (Russell and Wilson 1992). Action research appears to be very similar to audit (Closs and Cheater 1996, Waterman 1996), but this aims to generate theory in addition to changing practice (Waterman 1996, Greenwood 1994), which differentiates it from audit. Audit may use theory but does not generate or test it (Closs and Cheater 1996). It can be seen, however, that the systematic audit process could help practitioners acquire skills that are also needed for research.

Concerns were raised by some nurses who were experienced researchers about the lack of rigour involved in audit, which potentially produces invalid results. It could be speculated that the government is setting aside vast sums of money for work which, if done as a formal evaluation research project with the associated rigour, would give far greater reliability and validity to the work with far less possibility of error or bias. To
be useful for practice, audit needs to carefully planned, with a structured approach, and to use techniques such as total population sampling in small settings, or random sampling in larger settings, rather than practitioners selecting samples that will give a favourable result (personal experience of the process of a county-wide asthma audit in the GP setting). Closs and Cheater (1998) recommend that audit sampling methods ensure that the information gathered is representative of the total population. Audit is a central tenet of the CE/CG framework and funding is available to support this. There is a case for evaluation research to be funded from the same budget: departments and resources are in place and could be extended for this type of research.

The ability of all nurses to appraise research evidence and use it to enhance clinical effectiveness was seen as the most important aspect of the research cycle, with an acknowledgement that few nurses will actually become research-active themselves. This is a generally held view: Kenkre and Foxcroft (2001) also saw Registered Nurses as appraisers of research, with primary research activity progressing with advanced clinical roles such as CNS and NC. Bishop and Freshwater (2004) outlined three levels of research involvement: ensuring practice is evidence-based (a requirement of every nurse), facilitating those who are interested in research and being a dedicated researcher.

However, in order to base practice on evidence, the research needs to be performed, be rigorous and available via dissemination. If primary nursing research is under-valued in clinical settings, especially if the multiprofessional agenda ignores the nursing contribution to any proposed research, the danger will be that nursing
knowledge generation declines and there will therefore be insufficient evidence available to inform practice (Thompson and Watson 2004). Clarke and Wilcockson (2001) recommended a closer integration of education, practice and knowledge generation by practitioners if practice is to be developed; practitioners are recognised as having the potential to create knowledge and reconceptualise patient care. McCormack (2003) also identified a need to create a research culture in practice, and stated that the most feasible way to achieve this is through more practitioner research.

**New roles**

With the advent of new policy and legislation, new nursing roles have emerged to cope with NHS changes. Documents such as Liberating the Talents (DoH 2002b), and the loss of working hours for medical staff as a result of the European working time directive (DoH 2003) and renewed focus on health promotion and public health as outlined in Saving Lives – Our Healthier Nation (DoH 1999e) have meant a period of exceptionally rapid change in the NHS. Rapid expansion in numbers of NCs - envisaged to reach 1,000 by 2004 (DoH 2000c) - play a key part in delivering government policy, and undertaking research is a central part of their remit. Other new roles have also developed that enhance the research contribution, as seen in the previous chapter, and there are now opportunities for these clinicians to contribute to nursing knowledge generation within their fields of practice.

It remains to be seen how far these nurses will influence research policy. They are ideally placed to do so, with many already working strategically by, for example, having a voice on national committees in their field, working across many
organisations and undertaking research activity to underpin practice and influence decision-makers (Woodward et al. 2005b). The background and characteristics shared by many of those interviewed in the present study should provide the skills needed to achieve this if the will is there and the opportunity is provided (Woodward et al. 2005a). However, even if more nurses do expand their roles to encompass this type of activity, there is no guarantee that policy-makers, either at trust level or nationally, will act on their recommendations; as has been seen, some are already frustrated by lack of involvement in policy-making at local level.

**User participation**

The final area of policy to affect on research is that of user participation. The NHS has been obliged to consult with the public since the late 1990s (DoH 1997a), although the quality of this process was initially seen as questionable (Jordan et al 1998). This consultation has extended to research with the establishment of the Standing Advisory Group on Consumer Involvement in the NHS Research and Development Programme (NHSE 1998) and a variety of models for achieving this have been developed, such as focus groups, service-user research advisory groups, citizens' juries, and user consultation panels (Tinson and Hutchinson 2001, Rhodes et al. 2002, Ong and Hooper 2003, Maslin-Prothero 2003). Organisations in the present study were increasingly beginning to involve users in all aspects of care, including research, via membership of committees, RDSUs, focus groups, to reflect government guidelines (NHSE 1998, NHSE 1999b). With regard to nursing research, nurses were often seen as ideally placed to work with users, and many of those interviewed were working with patients and clients when undertaking their research.
The exact nature of user involvement may not yet match what is desired. User involvement in research is seen as a genuine partnership, with involvement with a project from its inception, i.e. identifying what topics are important to users to research, even before the planning stages, and then involving them more when planning projects instead of just carrying out research 'on them' (Evans and Fisher 1999, Hunt 2000). Examples of this approach are now appearing (see, for example, Rhodes et al. 2002, who published a joint account with service users of a service users' advisory group which supported and advised a project to evaluate diabetes services). This partnership approach has been slow to happen and not without problems of role confusion; for example, users in one study perceived focus groups as a forum for voicing their own experiences of living with low back pain, rather than a means to formulate research topics (Ong and Hooper, 2003).

Most nurses in the present study identified an issue themselves and undertook research into it, but actual user involvement was limited to the data collection process. However, this is a relatively new area of policy and trusts have only recently started involving users; it will be interesting to monitor over the next few years how far it translates successfully into the research arena, especially if user requirements for research conflict with NHS priorities.

Support systems and nursing research activity
The impact of support systems on NR activity will now be considered. This section will consider the impact of the models identified in Chapter 7, and the categories that emerged from the global analysis.
Organisational models of research support.

Three organisational models of support were identified that were strongly related to the size and nature of the trust. Larger, acute, well-established secondary care organisations (PDM, NRCM, DNM) shared similar approaches, with a structure that included a dedicated directorate for R&D. All three organisations had a named person who facilitated NR, and there was on-site access for nurses to R&D support facilities. The other two organisations were structured differently. One (JAM) was a small partnership trust for MH/LD for one county in the region. Here, the DoN was an active researcher, held a joint appointment with an HEI and was director of research for the whole trust. The other organisation was also newly-formed as a tPCT (HDM). Here, research policy and funding were managed through the Head of Development, Research and Education. There was a research steering committee which decided policy and research matters for the organisation. Research support from the RDSU was off-site in both models.

Nursing research activity was small in all trusts, but in the acute trusts mechanisms had often been established over several years to fund (or partially fund) and support nurses interested in research. Nurse researchers in these trusts used the on-site RDSU facilities extensively. These trusts all employed nurses who had done, or were doing, PhDs. They all had a long history of medical research, and support systems were in place and known of. All employed CTRNs. The other organisational models were in newly established trusts, and facilities were not immediately accessible. However, these were still used by many, especially in HDM where they were only two miles away. Both these organisations were keen to develop their NR portfolio, which
was small in both trusts, and both were therefore seconding staff for postgraduate study.

The impact of these organisational models on NR can therefore be seen to be largely related to the size and nature of the organisation. Large acute trusts had well-established systems and had seen a slow but steady growth in research activity. Newer, smaller organisations were setting up systems and actively trying to encourage staff to become more involved in R&D activity. Support was present but not as accessible, especially for JAM, where the DoN provided most of the advice and support as the RDSU was some distance away.

Robinson (1999) found that using a model of shared governance, combined with a joint appointment of a full-time lecturer for R&D support, increased NR activity and quality in an acute children's trust. McCormack (2003) also recommended a shared governance framework. This model ensured that practitioners were empowered to decide research priorities and supported to develop them. One large trust (PDM) was in the process of introducing shared governance, which may have a future impact on NR activity. However, Gavin et al. (1999) warned that the benefits of shared governance require a radical alteration in nursing culture, and may not succeed if resource issues remain the province of management, as supervisory and middle managers may resist the introduction of initiatives to empower front-line staff. Jinks and Green (2004) were developing a joint NR strategy between one large acute trust and an HEI, using a joint appointment model. However, they had not evaluated the effects as work was ongoing. The joint appointment model seemed to work where the appointment was full-time (Robinson 1999); the JAM model in the present study
worked less well due to the multiple responsibilities of the DoN within the organisation: support was in place but difficult to access if the DoN was very busy. The additional appointment of a lead nurse for NR might help resolve these problems.

Organisational size and nature was seen in the literature as having an effect on research support and research utilisation. Campbell et al. (2002) found that R&D support was more easily available in the acute sector, and financial support for training and conferences was poor in primary care. However, Brett (1987) found that large acute hospitals, with many mechanisms in place to support staff, had the lowest scores for research utilisation and small hospitals had the highest, although nurses at ward level did not actually use support mechanisms in any of the hospitals. Rodgers (1997) also found that the smaller the organisation the higher the level of research utilisation. Nurses were able to overcome effects of size through the use of other facilitative factors, such as good communication systems, supportive managers and less bureaucracy. If this finding transfers to research activity, it may be that the two smaller organisations, as they become well-established, will be able to overcome effects of size and lack of on-site resources and firmly establish NR as a strong, thriving activity.

The fact that most nurse researchers in the present study were using support mechanisms is an indication that these are now seen as expert and used by practitioners, in contrast to nurses in Brett's (1987) study. However, in the present study nurses were actively undertaking R&D, frequently for awards, rather than implementing findings, which may be the reason for the better use of support facilities. Parkin and Bullock (2005) also found that all nurses undertaking research
were using support mechanisms in the organisation: in their model, the trust had formed a dedicated nursing research unit to advise and support NR and appointed link nurses to liaise between the NRU and clinical areas so that clinicians were aware of the support available.

Browne et al. (2002) surveyed lead R&D nursing posts in acute NHS trusts in 52 organisations and found that the 31 respondents had 17 different job titles. Only 23% of these posts were purely for nursing research. Their primary role was facilitating others. These findings were reflected in the present study, where NR leads also had differing job titles and responsibilities. Three were advising nurses only (PDM, NRCM, DNM), but this was a part-time aspect of these posts. In other organisations (JAM, HDM) support was also provided for other professional groups, but the primary function of NR leads was also facilitation. No NR lead was in a dedicated NR post; all incorporated this into other responsibilities. The amount of time spent was only quantified in one post (NRCM), where 40% of the working week was for research facilitation and supporting implementation of evidence into practice. Browne et al. (2002) also found that there was a wide variation in the nature of the role and lack of a coherent approach.

In conclusion, the impact of the model of organisational support on NR activity was much smaller than had originally been anticipated, and other support factors also emerged as influential.

*Networks*
Networks provided an important support mechanism for many researchers via peer groups, internal and external specialist forums, charities and HEIs. NCs especially were all involved actively with at least one NC forum, initially locally or regionally but latterly with national, discipline-specific networks. These were found to be beneficial, especially as the role was in its infancy. Nurses doing awards reported finding peer support networks with fellow-students extremely valuable. The use of networks in NR is well established: Kirby (2004) documented how pioneer nurse researchers used both formal and informal networks to make progress and overcome barriers from within and without the profession, and Le May et al. (1998) documented organisational networks, such as research forums and research awareness groups.

The importance of networks was recognised by Sarre (2003), who recommended that primary care organisations needed to build effective research networks. The RG framework (DoH 2001a) also recommended local learning networks, whilst the Task Group 3 report (HEFCE 2002) saw research networks as important for supporting both researchers and developing links between institutions. On-line networks are increasingly being used: the proposals for the virtual National Institute of Health Research (DoH 2005b) recommend a national researcher’s forum. Gillibrand et al. (2002) have developed interactive networks via the internet between clinical and academic nurses to promote research in practice and provide support, but acknowledge that these will need to be evaluated to assess the benefit to service users and the nursing profession. Some lead nurses in the present study felt that networks with HEIs could be better developed, and HEIs were seen as concentrating on delivering educational contracts at the expense of research activity. Carmwell et al. (2004) used an action research (AR) approach to investigate developing a joint NR
strategy for NHS and a local HEI, whilst Jinks and Green (2004) were also developing a collaborative NR strategy. This model may facilitate better networking but needs to be evaluated for effectiveness.

Within primary care, local research networks have been developed throughout the UK since the early 1990s (Thomas et al. 2001). In 1998 they were funded via the NHSE to increase research capacity following the Mant report (DoH 1997b). Thomas et al. (2001) saw the advantages of research networks as producing multidisciplinary collaboration, widespread ownership of research activity, motivation for dissemination and sharing otherwise costly research infrastructures (p589). Normand (2004) also advocated networks of nurse researchers to develop relationships and collaboration, thus building NR capacity. Bond et al. (1996) convened ‘expert groups’ of nurses from practice and research with a special interest in a particular clinical specialty. These networks enabled a sharing of knowledge from research projects, but the projects were also informed by practice.

In the present study, formal and informal networks were a valued means of support. Formal networks need organising and managing, but should be considered as a means to encourage and support experienced researchers and to nurture and support novice researchers or clinicians with an interest in research. More joint networking with HEIs is needed outside of educational provision.

Support

NHS resources

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Support for nurses undertaking research was available from trusts and, where nurses were doing the research for an academic award, HEIs. NHS facilities such as libraries, R&D departments and/or RDSUs were used extensively and gained the most praise. The NHS has introduced electronic resources in libraries and on wards/units following implementation of the national IT strategy (DoH 2002c). This allows access to national and international electronic databases and a vast wealth of information and literature for all NHS staff. RDSUs were set up in the early 1990s following publication of the Conservative government's R&D strategy (DoH 1991). They are funded by the NHS to provide support for all NHS staff.

Most participants in the present study who used these resources were highly complimentary about the resources and levels of expertise available and the amount of support received. This is a noteworthy achievement and is a good example of where NHS research support funding has provided a service that is accessible to, and is used and valued by, researchers. Distance from the RDSU was a problem in one trust (JAM), where other support mechanisms were in place but not always successful as they relied on one busy senior member of staff. As previously discussed, nurses undertaking research now seem to be more aware of what is available and are accessing it (Parkin and Bullock 2005). A few highly experienced researchers felt that the expertise within the RDSUs was insufficient for their advanced needs; the NHS needs to consider how best to provide support for these practitioners and more liaison with experts in HEIs. More joint appointments of dedicated senior academics, as outlined by Robinson (1999) and Jinks and Greene (2004), may be key to this provision.
Mentorship

Many nurses wished to have an organised system of mentorship from experienced nurse researchers in their trusts. Possibilities to increase support include more joint appointments of experienced academics, as discussed by Robinson (1999) and Jinks and Green (2004), and increased capacity via RDSUs: one outcome of Phase 1 of the present research was the employment of an additional member of staff in the RDSU with expertise in qualitative research to complement the existing expertise in quantitative research. Both now provide support and supervision both within the trust and jointly with the local HEI for NHS staff doing higher degrees. Tanner and Hale (2002b) identified facilitation by others as the most important factor in helping practitioners achieve a publication.

However, NR is poised to grow further (Kirby 2004) and, in order to provide a critical mass of support as numbers of practitioner-researchers grow, additional strategies are needed. Titchen and McGuinley (2003) explored the concept of 'critical companionship', defined as:

'A helping relationship based on trust, high challenge and high support in which an experienced practitioner accompanies a less experienced practitioner on a learning journey' (p115).

This approach has been used in practice development (McCormack et al. 1999) and education (Joyce 2005), but is seen as particularly appropriate for facilitating novice practitioner researchers (Titchen and McGuinley 2003). Wright and Titchen (2003) provided evidence that nurses can quickly become ‘advanced beginner’ critical companions, although expertise in the role takes several years to build up. This may be one model that could be developed to support novice practitioner-researchers, but will take time to achieve: some managers and lead nurses in the present study...
acknowledged a lack of critical mass of nurses with sufficient experience to undertake a research mentorship role. As capacity and capability in NR are built up (DoH 2000a, HECFE 2002) this may become less of a problem, but only if practitioner research, as well as academic research, is valued and developed.

Managers and lead nurses often saw NCs as key in research facilitation, as did most NCs; the latter reported providing support for nurses doing research, as did some nurses who had completed Master’s degrees or doctorates or those who held joint appointments with HEIs. As the numbers of nurses completing postgraduate awards increases there is an opportunity to develop research facilitation/critical companionship skills in interested individuals, but trusts will need to ensure that this is formally organised and built into workloads: clinicians will need dedicated time if they are to provide high-quality mentorship.

**Managers**

Perceptions about managers’ attitudes to, and support for, NR were mixed. Some reported excellent support but others had great difficulty in persuading managers that NR was necessary or viable, whilst some reported that managers paid ‘lip-service’ to R&D activity by agreeing to it but then not providing time or support. This was also reported by Campbell et al. (2002), who found that managers said they provided support but in reality provided little, and yet often had unrealistic expectations of results. NCs in the present study felt that the research domain of their roles was the hardest to achieve, usually because of workload issues impinging on this activity. Guest et al (2001) also found that this element was in most danger of being squeezed out. This needs further investigation as to how best to ensure NCs are able to make
time and manage this aspect: joint appointments, with HEIs paying a proportion of the salary, might be one approach, and better appreciation by managers of the importance of this domain might also help.

The influence of management support on NR has been reported by others: Hicks (1995a) concluded that managers saw being a good nurse as incompatible with being a good researcher, whilst Robinson's model of shared governance (1999) empowered staff to identify and develop research priorities that would have been unlikely to develop from traditional management structures (Gavin et al. 1999).

McHaffie (2000) saw managers as in a position to facilitate or hinder research. She stated that managers should encourage and facilitate research that would help to inform good practice and facilitate dissemination and use of research findings, whilst deterring individuals from undertaking research that was unsound or inappropriate. Support from managers was also seen as influential in Tanner and Hale's study (2002b); nurses perceived research barriers as extrinsic, i.e. outside of their control, and saw these as staffing, finances and managerial support. Many used manipulation and/or covert behaviour to overcome these barriers. Managers need to have an increased awareness of the value of NR and the support that practitioners need when undertaking this activity. Tanner and Hale (2002b) found that nurses undertaking research did so to improve practice or address problems, and then used their results to inform and develop practice. Bostrom and Suter (1993) also found that nurses who had been involved in research activity were more likely to implement research findings. Managers need to be aware of the benefits for clients and health care that can be achieved by clinically-focused research.
McClarey and Smith (2005) highlighted organisational difficulties for managers: the commitment of their trust to supporting research was only briefly acknowledged by the Commission for Healthcare Improvement (CHI) and did not influence the trust's rating and was therefore not reflected in the trust's action plan. They commented that managers will become engaged with research once they see the value of the outcome, but that this engagement can be influenced by asking for research activity to be part of core delivery and included in the Healthcare Commission's assessment framework. These tensions reflect a wider concern about how R&D is valued within the NHS as a whole; it has not traditionally been seen as a core activity that should be taken into account when national evaluations are performed, and has not therefore been a priority for management.

**Higher Education Institutions**

Nurses doing research for awards had structured supervision and access to HEI resources, which generally worked well. There were a few issues, however. Students with a great distance to travel found this frustrating at times, especially if it was for a short session only. One alternative to this may be telephone supervision, but this was unpopular among those who had experienced it; they felt that face-to-face contact was preferable, although Campbell et al. (2002) saw telephone support as helpful if it enabled researchers to get started or keep going to completion if face-to-face supervision was not possible. Another possibility is the greater use of technology: HEIs and the NHS often have facilities for on-line meetings and some are already developing these, for example via satellite seminars involving HEIs and trusts, as seen in HDM.
Other researchers not doing awards but who had existing links with HEIs, such as NCs and LPs/RPs, also used HEI resources and support mechanisms. HEFCE (2002) recommended that NHS units should work more closely with HEIs to develop research partnerships; practitioners in the present study who had maintained links with HEIs found them a great source of support, and closer links for other researchers should be encouraged. HEIs can also benefit from such collaboration via joint publications for the RAE and researchers will benefit from the support and resources.

Several managers and lead nurses called for closer links and more joint working and ‘joined up thinking’ in the research arena generally. As seen in Chapter 5, the literature described several schemes for closer working with HEIs (Jinks and Green 2004, Camwell et al. 2004, McCormack 2003, Robinson 1999), most of which involved joint appointments. These hold great potential to increase joint working, liaison and support for researchers, but will need long-term commitment by both the NHS and HEIs in order to be properly established and evaluated.

**Individual influences and nursing research activity**

Individual influences on NR activity were discussed by three groups: nurse researchers, NCs and lead nurses, and three main factors arose: motivations, personal sacrifices and attributes. Attributes arose solely in the NC group and were more related to role achievement than research; therefore these results have been reported separately (Woodward et al. 2005a).

**Motivations**

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**Job-related and professional motivations**

Many researchers wanted to improve practice by research, and had identified an issue or area they felt could be developed. This was also a common finding in the literature: Tanner and Hale (2002b) found that the prime motivator for undertaking research was to improve clinical care, and all researchers in their study used the research to develop practice and publish results to a wider audience. Campbell et al. (2002) also found that a major motivator was to identify ways in which better patient care could be provided. McCormack (2003) rejected traditional research approaches but saw practitioner research as a means to encourage clinicians to value research as a means to change practice. Robinson (1999) also found that research gave nurses the opportunity to gain confidence in their ability and the power to introduce change to practice.

Others in the present study were research-active as part of their role, for example some NCs, LPs and RPs, and some had advanced skills that they had developed in order to undertake this. Many, especially NCs, saw research as an essential part of their role, although some had difficulties in developing it if they were under-achieving in other areas (Woodward et al. 2005a).

NCs in particular regarded research as a means to enhance the professionalisation of nursing and empower nurses, and they often facilitated research active nurses, in addition to undertaking research themselves, to help with this process. These sentiments were also echoed by lead nurses, some of who thought that nursing may never be a true profession unless research is firmly established and expected. These sentiments have been documented in the literature: Newman (1994) recounted her
personal shift away from pure research towards practice-based research that empowered nurses in practice, whilst Maggs (1997) stated that nursing needs research in order to be seen as a profession with its own body of knowledge and its own research approaches.

Tanner and Hale (2002b) recommended 'talent spotting' (p372) to develop nurses with a particular interest in research, in order to concentrate resources where they were most likely to be effective. These individuals could be the practitioner-researchers and NCs of the future: all the research-active nurses in Tanner and Hale's (2002b) study wanted to remain in clinical practice. Many nurses who were doing research for Master's awards in the present study were interested in obtaining a NC post.

**Personal motivation**

Many participants discussed their personal motivators for undertaking research; these included career progression, a personal interest in research, or as a means to greater autonomy. Some wanted to prove they could do it; for others it was the next logical step, especially for those doing Master's awards or PhDs who had previously studied in HEIs. Talent spotting (Tanner and Hale 2002b) might also enable nurses with a personal motivation to be identified and nurtured. McCormack (2004b) also recognised a need to nurture autonomy and entrepreneurship in nurses. Some participants in Campbell et al.'s (2002) study found, however, that skills carefully built up through Master's courses soon became lost if they were not used regularly, and it was reported that:
'... an underlying lack of energy bordering on depression surrounded the non-academic... research community.' (p90).

This finding is worrying: nurses in the present study undertaking practice-based research were mostly highly-motivated individuals, and it is important to continue to use their valuable research skills after they have been built up and to retain their motivation. Coghlan and Casey (2001) warned that practitioner researchers need a pre-understanding of organisational politics and the ability to manage political processes, along with active engagement with individuals, teams and departments, if they are to succeed. However, Tanner and Hale (2002b) found that nurses actively involved in R&D did not use lack of time or knowledge as barriers, but chose to see these as 'excuses' rather than barriers and just 'got on with it' (p369). It may be, therefore, that motivated individuals will overcome hurdles in order to undertake an activity they view as important; but this cannot be relied upon, and motivated practitioners need support and facilitation to enable them to build on existing skills.

**Personal sacrifices**

One of the most moving aspects of the present study was the accounts frequently given by nurses of the great personal sacrifices they had made in order to undertake research. This was particularly evident in those who had done academic awards, who had spent several years studying whilst working, mostly full-time, raising a family and/or dealing with other personal commitments. Many talked of great personal stresses, of hardly seeing their families for years, not taking holidays, and the effects of all this on family, friends, colleagues and self. Others had sacrificed jobs and salaries in order to do awards full-time, or had made financial sacrifices to pay for course fees. Most felt this was not sustainable in the long-term and that research as
an ‘add-on’ to nursing posts would not work. The ‘burnout’ effect also had implications for publication and future research activity, as discussed earlier. Theirs were not isolated experiences, as has been documented by others. Clarke and Proctor (1999) found that much emotional and personal investment went into research activity, whilst Tanner and Hale (2002b) found that this was also not seen as part of routine nursing work and that much of the research was done in nurses’ own time as they felt ‘guilty’ (p371) about doing it at work, even though it lead to direct improvements in practice. Meyer et al. (2003) reported that R&D nurses were frustrated and stressed to the extent that their health and well-being were affected. This is not confined to clinical areas: Bradshaw (2001) commented that nurse academics in universities who undertake doctoral studies usually do so on a part-time basis alongside a heavy teaching, administrative and clinical burden ‘at great personal sacrifice’ (p127).

More research is needed on how to support individuals, not just with the academic and/or research processes, but also with personal aspects, to try and reduce the stress suffered. Most felt that the extent of these sacrifices was not appreciated by others, especially managers, some of whom saw research as ‘an indulgence’. Le May et al. (1998) also found that managers saw NR as a luxury. Very little literature was found exploring practitioners’ accounts of their experiences (other than experiences of specific research approaches). The present study has provided some new data but, as practitioners increasingly undertake research, more information about these issues is needed. New researchers need to be nurtured, not deterred.

HEIs and trusts also need to examine systems and expectations, to ensure that unreasonable amounts of personal investment are not expected. Undue pressures
may be being put on practitioners (and academics) that not only interfere with their personal welfare but may also, in the long term, dissuade them from dissemination and future research activity. In the Faculty of Health and Social Work in the University of Plymouth, Master’s programmes have been extended to three years for part-time students to allow more time to complete their research studies: this may be one way of reducing personal pressures as students have more time available to plan, undertake and write up research. This was supported by NHS partners and most students are now funded through WDCs for the full three-year period. However, it adds an extra year of study for individuals, and it has yet to be evaluated as to whether or not students prefer the longer time commitment and the implications of this for their employers.

Partnerships and nursing research activity
Managers were the only group in the present study to discuss their perceptions and experiences of partnerships in depth. There is some overlap with other themes and certain aspects have already been discussed, such as user participation, multi-professional research and medical power: manager’s perceptions have been incorporated into those sections.

Partnerships with HEIs were frequently referred to. The main issue for R&D managers was lack of standardisation between the NHS and HEIs. Most called for common systems to be introduced for monitoring, because some HEI researchers were seen as unaware of NHS RG and ethics procedures. Arrangements for standardisation of processes between RECs and trusts have been proposed (DoH 2005a) to try and remove unnecessary overlap between RG procedures, but these do
not extend to HEIs. In the present study, the NHS and HEIs were seen as having different research priorities, and managers often perceived that HEIs' prime motivation was the RAE rather than R&D to improve services. This was also the view of Mulhall (1999b). Data protection issues also arose in the study, with no sharing of R&D information, which was a problem for some large trusts who historically had not always known of research personnel working on their premises if they were HEI employees.

These problems were gradually being resolved within organisations via RG procedures (DoH 2001a); for example, some trusts insisted on honorary contracts being issued for all researchers. Research governance arrangements have not always been popular with researchers: RG is frequently seen as over-bureaucratic and increasing workload but having a lack of transparency. However, benefits for nurses who are not experienced researchers include the availability of dedicated R&D staff who will advise on R&D management procedures (Clifford 2003), and potentially better communication channels with HEIs as procedures are structured and standardised.

Other partnerships that managers in the large trusts discussed were with charities, charitable funds, and other NHS organisations in multi-centre studies. These were all seen as sources that nurses could access for funding and experience. The use of critical companions (Titchen and McGinley 2003) may be one way of enabling novice researchers to explore the use of such sources of support.
Inter-relationships of factors influencing nursing research

In discussing factors influencing NR activity, inter-relationships between these factors emerged, as demonstrated in the global model on page 312. These are summarised below.

Perceptions of nursing research and individual influences

The discussion has highlighted that these two factors inter-relate:

- Individual perceptions of NR are influenced by exposure to research and higher education (Rolfe 1998, Clifford and Murray 2001, Mulhall 1995).
- Motivational factors can dictate how NR is perceived (Tanner and Hale 2002b).
- Perceptions of NR are influenced by individuals' prior experiences of undertaking research: stressful experiences may result in NR being perceived as impractical and difficult to undertake (Tanner and Hale 2002b, Clarke and Proctor 1999, Meyer et al. 2003).
- Nurses in roles where research is an integral part are usually interested in research and some see it as a means of empowering nurses and ensuring the development of nursing as a profession (Maggs 1997, Woodward et al. 2005a).

Perception of nursing research and support systems

These two factors also inter-relate:

- Perceptions of NR have historically led to a lack of support via funding, which has contributed to the low volume of NR and therefore perpetuated poor perceptions of NR (Rafferty et al. 2000a).
• These low volumes of NR contribute to a lack of support due to a lack of experienced mentors and facilitators (Sarre 2003, Campbell et al. 202, Jinks and Green 2004)

• Medical perceptions of NR can lead to a lack of medical support for nurses undertaking research (Rodgers 1994, Mulhall 1995, Le May et al. 1998, Coombs 2004).

• Good support via strong leadership gives positive messages about NR (Maggs 1997, Jinks and Green 2004)

• Under-valuing of NR by managers can lead to a lack of support (Hicks 1995a, Robinson 1999, Campbell et al. 2002, Guest et al. 2001, Tanner and Hale 2002b)

**NHS influences and support systems**

NHS influences impact on support systems through government NHS policy and guidance:

• Historically, the NHS concentrated on funding medical research and neglected support for other groups (Shaw and Clifford 2004)

• The EBP agenda has led to support for R&D activity that concentrates on 'gold standard' experimental research at the top of the hierarchy of evidence (Walker 1994, Bowling 1997, Gupta 2003)

• The composition of RECs has traditionally been 'parochial', which has led to lack of understanding of and support for non-traditional research (DoH 2005a)

• Improving financial support for increasing NR capacity and capability at a national level was hampered by lack of ring-fenced funds (DoH1993b HEFCE 2001) which has only recently been addressed (HEFCE 2002, NCCSDO 2003)
National support for NR via a dedicated funding stream has been seen to improve support for NR in other countries (Tierney 1998, Thompson 2000, McCormack 2004b)

Research is not seen as a core activity when trusts are assessed by the Healthcare Commission; this influences trust management decisions about support and planning for R&D (McClarey and Smith 2005)

New nursing roles such as the NC can lead to increased levels of support for other nurses interested in research (Guest et al. 2001, Woodward et al. 2005b)

NHS national R&D systems such as RDSUs (DoH 1991) and IT investment (DoH 2002c) provide much valued support for nurses who are interested in or undertaking research, and these are being increasingly accessed (Parkin and Bullock 2005).

**NHS influences and partnerships**

National NHS policies can be seen to impact on other partners.

- Funding in HEIs for nursing is largely derived from NHS educational contracts, but this is seen as detrimental to research activity (Bradshaw 2001)

- The NHS agenda for large-scale programmes of research are making it difficult for small-scale projects to be undertaken (Rafferty and Traynor 1999) and bureaucratic and time-consuming RG procedures (Howarth and Kneafsey 2005) may be leading some HEIs to remove the need for postgraduate nursing students to undertake primary research (Meerabeau 2004)

- Joint working partnerships with HEIs are being developed in some areas via joint appointments to encourage practitioner research (Camwell et al. 2004, Jinks and Green 2004)
• National NHS R&D resources such as RDSUs (DoH 1991) are available for nurses undertaking academic awards (Clifford 2003)

• NHS RG strategies are affecting HEI-employed researchers, who are now subject to more structured NHS approval and monitoring systems (DoH 2001a) which historically have been unstructured (Clifford 2003)

• The NHS agenda for user participation (DoH 1997a) has required partnership working with service users in research. This is still in its infancy but more reports of participatory collaborative research are appearing (Rhodes et al. 2002, Ong and Hooper 2003)

**Partnerships and Individual influences**

Partnerships and individual influences are also inter-related, although to a lesser extent than other factors. Nurse consultants were particularly good at seeking out partners:

• NCs often sought out support partnerships with others at specialist forums and networks at local, regional and national level.

• Educational and research activities were often undertaken informally by NCs in partnership with their local HEI. This was more formalised for other groups, especially joint appointees such as LPs and RPs. Carnwell et al. (2004) and Jinks and Green (2004) reported the advantages of joint initiatives with HEI researchers to try and improve NR support and joint working

• Some entrepreneurial NCs had sought partnerships with other sources such as charities, pharmaceutical companies and other professional groups

• Some NCs liaised with other trusts in an advisory capacity
Novice researchers wanted individual support from a mentor: a few were able to seek this out via informal partnerships with NCs, medical staff or others identified as knowledgeable about research.

Sarre (2003) identified positive benefits to individuals of partnerships with a variety of organisations, whilst the proposals from HEFCE (2002) identified the need for research networks to draw in individual researchers. Titchen and McGinley (2003) suggested partnerships between individual researchers and critical companions to support and encourage novice researchers.

Conclusions and recommendations
The results of the present study revealed that many factors have an impact on NR activity and knowledge generation in clinical settings. Organisational models of support were found to be only one of these factors. A global model of all factors influencing NR activity has therefore been constructed and implications for nursing knowledge generation arising from the findings have been discussed.

Summary and recommendations for policy and practice
The findings of Phase 2 and the implications for nursing knowledge generation are summarised in Table 8.1, along with associated recommendations for policy and practice. The recommendations can be seen to fall into three broad categories:

- Support (opportunities, resources, time, facilitation, networks, education, research for and in practice)
- Partnerships between the NHS and HEIs (joint working, joint appointments, joint systems)
• Policy (recognition of the broad base of NR, funding, career pathways, power-sharing, clinical effectiveness)
### Implication of findings for nursing knowledge and knowledge generation

<table>
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<tr>
<th>Recommendations</th>
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<tr>
<td>NR should be viewed by the NHS and funders as a broad-based, eclectic form of enquiry</td>
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<td>Evaluate results of the HEFCE/NCCSDO capacity and capability building programme</td>
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<td>Monitor future trends in capacity and capability nationally</td>
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<td>Consider a nursing research (or joint nursing and AHP research) council</td>
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<td>Consider reviewing the MRC to become a united health research council</td>
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<td>Introduce formal systems within the NHS for one-to-one mentoring/critical companionship for novice researchers</td>
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<td>Provide developmental programmes for experienced researchers to undertake this role.</td>
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<td>Evaluate these initiatives</td>
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<td>Ensure appropriate representation of women in all aspects of R&amp;D to include organisational and national systems</td>
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<tr>
<td>Consider reviewing the structure and function of funding bodies — the MRC could become a health research council</td>
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<tr>
<td>Alternatively create a nursing research council</td>
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<td>Consider moving to participative management models such as shared governance</td>
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<td>Educate other groups as to the eclectic nature of NR, for example students in medical school</td>
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<td>Appoint more non-medical staff to key R&amp;D posts both nationally and within NHS trusts, e.g. R&amp;D directors</td>
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<td>Develop more practice-based NR</td>
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<td>Develop more new nursing roles that incorporate NR activity</td>
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<td>Develop a mentoring/critical companion system to support nurses with processes</td>
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<td>Standardise procedures between the NHS and health/medical faculties in HEIs</td>
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<td>Introduce more practice-based research</td>
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<td>Use participatory research approaches such as action research</td>
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<tr>
<td>Introduce nurses to R&amp;D gradually via experience of audit approaches</td>
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<tr>
<td>Encourage a closer integration of education, practice and research</td>
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<td>Remove the emphasis in the NHS EBP agenda of experimental approaches for groups where it is inappropriate</td>
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<tr>
<td>More joint NHS/HEI researcher-practitioner appointments may help remove barriers</td>
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<tr>
<td>NHS organisations need transparent processes for educational development for the develop research skills or for R&amp;D participation</td>
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<td>NHS funding bodies need to value NR and promote opportunities</td>
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### Table 8.1 Implications of findings and recommendations for policy and practice
Managerial support and organisational cultures are important in encouraging nurses to generate knowledge

- Managers need to be informed of the benefits that NKG can provide to clients and organisations
- New managerial models such as shared governance need more evaluation to identify the effects on NKG
- The Healthcare Commission should include R&D activity as part of core delivery and include this in its ratings
- Nurses with R&D activity built in to posts need to be assured they will be given time and resources to undertake this
- Equal emphasis on the “D” arm of R&D to help with research utilisation in the practice setting
- National recommendations for flexible research career pathways should be implemented and evaluated as soon as possible

Lack of research dissemination and publication of NR limits the adoption of nursing knowledge in practice

- Critical companions/mentors should help novice researchers to disseminate and publish high quality research
- HEI supervisors should actively help and support nurses to publish high quality research
- Writing for publication workshops and presentation skills workshops should be incorporated into postgraduate studies
- Syndicates/journal clubs/research networks should provide support for writing and peer review of draft papers for researchers
- NHS organisations should encourage and fund nurses to present high quality research at conferences, both internal and external

The removal of requirements for postgraduate students to undertake primary research impacts on nursing knowledge generation by reducing opportunities to develop research skills in a supervised environment, and prevents nurses based in clinical practice from investigating clinical problems or issues

- NHS organisations and NHS funding bodies should work closely with HEIs to ensure that primary research remains a core part of Master’s awards.
- NHS organisations and HEIs should encourage practitioners doing awards to research clinically relevant issues
- NHS organisations should support nurses in implementing findings of high quality research

Clinical trials research nurses could be developed to make a contribution to nursing knowledge generation

- Time could be built into contracts for NR for more CTRNs
- Structured support should be provided
- CTRNs should be managed by nurses in the organisation or jointly managed with principal investigators to provide opportunities for development
- Organisations should consider employing CTRNs directly, with reimbursement from research funders

The loss of small regional R&D grants has impacted negatively on nurses who want to undertake small developmental projects.

- More local schemes via SHAs or hospital trustee charities should be used
- Local start-up schemes should be supported by the new proposed new NIHR (DoH 2005b)

A concentration on audit limits theory development

- Use more evaluation and continuous quality improvement research to evaluate practice
- Use more action research to evaluate care, build theory and implement change
- Fund these from clinical effectiveness budgets

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<th>Table 8.1 (cont.) Implications of findings and recommendations for policy and practice</th>
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<td>366</td>
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New nursing roles have the potential to make a huge impact on nursing knowledge generation.

<table>
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<tr>
<th>Managers and organisations should support the research elements of these roles</th>
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<tr>
<td>The amount of time devoted to R&amp;D activity needs to be quantified and agreed by practitioners and organisations</td>
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<td>Adequate resources should be available to support this aspect of the role such as computer software, dedicated office space and access to mentors</td>
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<tr>
<td>HEIs should be actively involved with practitioner-researchers such as NCs in partnership with NHS trusts</td>
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<tr>
<td>HEIs should consider partial funding for such posts to give weight to the research element</td>
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<tr>
<td>The R&amp;D aspect of new roles should be evaluated as to outcomes for both client care and NKG</td>
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The generation of nursing knowledge should be informed by user's perspectives.

| More integration of users in all stages of R&D activity |
| Evaluation is needed of the outcomes of current models of user involvement |

The impact of models of support is only one of many factors influencing nursing knowledge generation but certain models such as shared governance and joint appointments have been reported in the literature as beneficial. Organisational size and nature can have an effect on nursing knowledge generation.

| More evaluation of the outcomes of shared governance and joint appointments is needed nation-wide |
| Dedicated R&D joint appointments with HEIs could be introduced and evaluated: full time in large organisations and possibly one post shared between two smaller organisations |
| More research is needed into the particular issues faced by small NHS organisations |
| All organisations need a nursing research strategy to identify priorities and identify structured support systems (such as mentoring and staff development policy) |
| Consideration should be given to joint NR strategies with HEIs |

Research networks provide valuable support which increases both quality and volume of NR, and therefore helps nursing knowledge generation.

| Expand organisational and local networks |
| Invest in on-line facilities to create 'virtual' networks |
| Set up more joint NHS/HEI networks |

NHS support mechanisms such as RDSUs and IT/library resources are well used and provide valued support for researchers which adds nursing knowledge generation.

| Continue providing these resources |
| Raise awareness of the facilities available within trusts so that all novice researchers are aware of support systems |
| Provide more support for those who work some distance away, for example by computer conferencing or telephone appointments |
| Ensure that RDSUs have staff who can advise on all major research approaches |

Highly experienced practitioner-researchers do not always find specialist support within their organisations, which can limit nursing knowledge generation.

| More liaison with HEIs needed |
| A national database of NR expertise may help researchers locate specialist support |
| More joint appointments of senior academic researchers may help these practitioners develop their advanced skills further |

The quality and availability of supervision from HEIs influences the outcomes of nursing knowledge generation for postgraduate students.

| Increase the use of new technologies such as computer conferencing and satellite conferencing |
| Provide high quality training for potential supervisors and mentorship for new supervisors |
| Provide more joint supervision between NHS and HEI |

Table 8.1 (cont.) Implications of findings and recommendations for policy and practice

367
Practice led nursing knowledge generation leads to improvements in client care and intervention to resolve practice problems

- Increase the amount of practice-led R&D
- Enable more nurses to undertake this by provision of time and education
- Provide mentorship from experienced researchers/ key staff e.g. NCs
- Consider more joint appointments of both experienced academics and practitioner-researchers
- 'Talent-spot' for interested practitioners and develop their skills
- Facilitate experienced practitioners to continue using R&D skills so they are not lost
- Evaluate the effects of these interventions

If undue personal sacrifices are made by individuals in order to undertake research, they will be deterred from undertaking further nursing knowledge generation

- More research is needed on factors contributing to stress and personal sacrifices amongst nurse researchers
- Ways in which to reduce this need to be investigated
- NHS and HEI staff and managers need to be more aware of this problem and support researchers to try and limit these effects

<table>
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<tr>
<th>Key to abbreviations: NR = nursing research, NHS = National Health Service, HEFCE = Higher Education Funding Council for England, NCCSDO = National Coordinating Centre for Service Delivery and Organisation, AHP = allied health professions, R&amp;D = research and development, MRC = Medical Research Council, HEIs = higher education institutions, EBP = evidence-based practice, NKG = nursing knowledge generation, CTRNs = clinical trials research nurses, SHAs = strategic health authorities, NIHR = National Institute for Health Research, RDSUs = research and development support units, IT = information technology.</th>
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Table 8.1 (cont.) Implications of findings and recommendations for policy and practice

**Achieving change**

Some of these recommendations are achievable, especially those which individual trusts can address. These include making transparent the processes and opportunities for educational development so that all staff who are interested have access to these: as Tanner and Hale (2002b) reported, research capacity may benefit from involving interested individuals.

Key individuals in trusts, such as the lead nurse or R&D facilitators, can also work with line managers to inform them of the benefits of practice-led research, using the clinical effectiveness framework to demonstrate potential improvements in patient outcomes and cost-effectiveness benefits. This may involve locally-led meetings or educational initiatives for line managers to inform them of the benefits, but also of the pressures that nurses undertaking research may experience, in
order to provide a more structured support system. This can in turn be helped by
the introduction of critical companions (Titchen and McGuinley 2003) – all trusts
had a ‘pool’ of nurse researchers, many of whom were already offering informal
support to others, but this needs to be formalized and recognised and time built in
for this. Similarly, lead nurses and line managers can support the establishment of
(or, where they exist, continuance of) nursing research networks, for example
journal clubs and ‘virtual’ networks, as a means of support for nurse researchers.

The development of CTRNs is also feasible, as seen in NRCM where funding was
available for developing nursing research within some posts. However, this
funding was external, and in the key R&D priority area of oncology: it may be less
easy to obtain funding in lower-priority areas. The nurses concerned were
appointed knowing this was part of their role and were interested in undertaking
this (and had direct support from their line manager, who had suggested this to the
research funding body herself). Also, not all CTRNs may wish to develop NR skills
or undertake academic study to do this: as McCormack (2004a) pointed out,
expertise in specific research techniques is not the same as developing nursing
research methodological expertise.

In order for trusts to be able to achieve the above changes, however, there needs
to be strong organisational commitment and the issues of time, motivation,
capacity and resources may still provide a barrier to the success or otherwise of
such initiatives. Strong leadership will be a factor in the success or otherwise of
this, as also highlighted by Maggs (1997) and Jinks and Green (2004). Shared
governance approaches may be another way forward (Robinson 1999,
but, as McCormack stated, these approaches need further evaluation as to their effectiveness.

As can be seen from Table 8.1, there are also some recommendations from the present study that may be far more difficult to achieve. Many of these centre around areas of policy, such as joint working with HEIs, issues of national relevance such as funding and capacity for NR, and cultural/traditional issues such as power and gender. Some have been highlighted previously as a result of other research, with little evidence of change, although one notable exception to this is the recent funding initiatives to boost capacity and capability in NR (NCCSDO 2003).

Joint working with HEIs has been debated by many, and the literature highlights the difficulties inherent in this process: Camwell et al (2004) were able to identify areas where collaboration and joint working would be possible, but the project floundered due to a lack of resources to take it forward. Jinks and Green (2004) found that both institutions had problems with research capacity and capability, although an initial joint appointment had been made of a professor in one area of care. Dunn and Yates (2000) found that holders of clinical chairs in nursing in Australian HEIs felt the need to secure sustainable income sources to ensure the continued viability of their positions. Other more established joint appointments such as LPs have been reported as resulting in problems such as role conflict, stress and burnout, with inherent difficulties in ‘serving two masters’ (Williamson 2004 p794). These problems are not easy to resolve; as has been seen in the present study, HEIs and NHS trusts are frequently seen as working to differing agendas with differing priorities. The StLar report (Butterworth et al. 2005) has
advised a flexible career structure, with researchers able to move easily between the two sectors which, if adopted, could lead to more joint working, but organisational politics and resource issues in both HEIs and the NHS can provide immense difficulties for those already holding joint appointments and those wishing to develop these. Further research is needed on the feasibility of joint working initiatives, and it would be interesting to repeat some aspects of the present study in the HEI setting as a comparison, to gain some baseline data about the current state of nursing research activity, and support for this, in the academic setting. This would then provide information from both sectors that may inform future joint working initiatives.

Issues of tradition, power and gender may also impact on the achievement of some of the recommendations. Funding for NR has been historically difficult to obtain and this has been linked to traditional biases against methods used, power issues and traditions, with NR being a relatively new field in the NHS R&D funding arena that is having to compete with well-established traditions in the medical sciences (Gupta 2003). The DH/HEFCE Task Group 3 study (HEFCE 2001) has resulted in some capacity-building for NR, but NR is still largely self-funded (Rafferty and Traynor 2004b). There have been other calls for a joint health research council to replace the MRC, or for the establishment of a dedicated NR council (Mulhall 1995, Tierney 1998, Thompson 2000) but this has not been addressed by government, and Bellman (2005) pointed out that England still has no dedicated national NR strategy, unlike Scotland, Northern Ireland and Wales. These factors, along with a continued adherence to the politics of EBP with its associated hierarchy (which is inherently linked to medical, rather than nursing, research approaches) (Redwood 2005), make it very difficult to predict how far
funding opportunities for NR will grow, especially with the heavy political emphasis on the multi-disciplinary research agenda (Thompson and Watson 2004). Even the latest policy document on the creation of a NIHR (DoH 2005b) concentrated on the creation of academic medical centres, with little mention of other disciplines involved in health-related research.

In conclusion, it can be seen that, whilst individual organisations can introduce local measures to achieve change in the way that NR is supported and prioritized, achieving change at a wider level, especially working with other sectors or changing policy at a national level, is more complex and will take longer. Work has been started with capacity building, but far more is needed to address all the issues. This needs to be continued at a national level through professional organisations such as the RCN and RCM and at government level, with input from both the service side and the academic sector.

Conclusion to the thesis
The present study sought to evaluate nursing research in the NHS in the clinical setting. Phase 1 involved working with one large NHS secondary care trust to identify NR activity and develop a NR strategy. As seen in Chapter 4 the objectives of Phase 1 were mostly met (it is possible that not all NR activity was recorded due to a low response rate to the questionnaires). However, the strategy to promote NR was developed and the organisation was able to use this to provide a more structured way to support NR activity.

Phase 2 involved working with five NHS trusts to explore nursing research activity and analyse support for nursing research. The objectives of the research were
met, with profiles of organisational support and management of nursing research provided for each organisation; organisational models of how nursing research was supported were then developed. The impact of these on NR activity has been analysed. The perceptions and experiences of nurses undertaking nursing research in clinical settings were explored, and the impact of all findings for nursing knowledge generation discussed. Multiple factors influencing NR activity in clinical settings were identified: this altered the focus of the study slightly when it emerged that the model of organisational support was merely one factor of many that affected NR activity. The focus of the research was therefore amended to identify other factors and create a global model of the influence of these on nursing research activity. This has been achieved and overall recommendations for policy and practice arising from the findings have been made.

To conclude, this thesis has identified some organisational models of research support for nurses and has provided and analysed in-depth accounts of the perceptions of various groups towards NR. It has also explored the perceptions and experiences of nurses undertaking research in the clinical setting. A global model of factors influencing NR activity has been constructed and justified. These findings have provided a contribution to the knowledge about nursing research in the clinical setting.
CHAPTER 9. REFLECTIONS ON THE THESIS

Introduction
The final chapter will reflect on various sections of the thesis to provide a reflective narrative of five main areas: the overall strengths and limitations of the study, the definition of nursing research used for the study, the use of data within case study research, the inductive process and the reporting of results to the five NHS trusts involved in the study.

Overall strengths and limitations of the study
The study is a highly topical area, as NR activity in the clinical setting has grown over the last ten years with the advent of new roles such as the NC (DoH 1999b), the transfer of nursing education into HEIs (Shaw and Clifford 2004) and the EBP policy agenda (Redwood 2005). Overall strengths of the study include the fact that the work was undertaken directly with six NHS organisations to document research activity and analyse support mechanisms within the trusts. This enabled a NR strategy to be produced in one organisation (Phase 1 of the study) that led to a more structured means of support for nurses undertaking research. The other five organisations were studied using a case-study approach to provide in-depth information about the concept of nursing research within the trusts.

Recommendations for practice have been made that should enable organisations to reassess the nature of support provided, and implement further systems that the nurse researchers perceived as important in helping them to undertake research. In addition to providing recommendations for practice, organisational models of support have been constructed, and a global model of factors influencing NR activity has been explored; these models add to the theoretical knowledge base.
surrounding NR activity and support. The use of a multiple-case, embedded Type 4 case study approach produced robust evidence (Yin 2003) and the analytical process using the Framework (Ritchie and Spencer 1994) provided high levels of transparency and ensured that a clear, structured decision trail was accessible and visible for audit and peer review.

The limitations of the study include the low response rate to the questionnaire in Phase 1 of the work, which meant that it was not possible to generalise the results. This has been discussed in Chapter 3; the main implications of this for the research were that the NR strategy was informed not only by results but also drew on other sources of evidence such as the existing literature, and on the expertise of a steering committee comprised of members from practice, management and academia. If planning the study again, I would not only issue reminders to wards and departments and use posters, but ask permission from ward managers to visit wards at handover time and explain the study in detail, answer any queries from staff, and request their help with the study by completing the questionnaires. A more personal approach, with an opportunity for staff to ask questions about the study, might have helped improve the response rate.

One limitation of Phase 2 is that any case study research is not statistically generalisable, although it has fulfilled Yin's criteria for 'analytical generalisation' and 'replication' (2003 p33) in view of the Type 4 design. When reflecting on overall results, I also realised that, in view of the experiences and narratives of nurses undertaking research, it would have been interesting to have gained the perceptions of some of their immediate line managers as a fifth group of interviewees. If the study were to be replicated, this group should be included in
order to gain their perspectives to compare with those of the researchers. This might then enable organisations to decide what information line managers need in order to support staff undertaking research.

The other main limitation results from the findings: some recommendations are related to national policy and partnership working with HEIs, which are beyond the remit of individual organisations to address on their own. This will be further discussed later in this chapter.

Definition of nursing research used for the study

When the study was designed, I used the term 'nursing research' to cover research carried out by practitioners with a NMC registration as outlined in the introduction (see page 21). In Phase 1, this resulted in a range of returns of research profiles that included nurses who were assisting with medical research as well as those from nurses who had undertaken their own research. This enabled comparisons to be made between the two groups but also served to demonstrate that a clearer definition would be needed of the term nursing research. This was reinforced in Phase 2, when reviewing the literature on nursing knowledge generation, and also when I started interviewing participants: my original definition did not give me a clear working definition of nursing research. Although the literature review on NKG produced a wide spectrum of opinions about the nature of nursing knowledge generation, with some calling for pluralism (e.g. Stevenson 1988, Tierney 1998, Thompson 2000 and others calling for practice-led research (e.g. Rolfe 1998, Newman 1994), it was universally acknowledged and agreed by all authors in the review of NKG that nursing needs knowledge to be generated for and in practice. It also highlighted that pure nursing
research is seen as vulnerable, with nursing increasingly being absorbed into 'multidisciplinarity' with other healthcare professionals, in the same way that nursing departments in HEIs have disappeared into 'health', 'healthcare', 'health sciences', 'health studies' and 'health and social care' (Thompson and Watson 2004 p911). This was reflected in the interviews: some of those interviewed, especially R&D managers, spoke of 'health services research' and felt that NR on its own was untenable. One researcher, who held a joint appointment as a senior lecturer (within a university medical school) and a clinical nurse specialist felt that it was not possible to define nursing research but that the term 'healthcare research' was appropriate: she saw any research she did that benefited patients was healthcare research, rather than nursing research, and did not differentiate between the two.

This made me reflect and rethink in more detail about what nursing research, as opposed to health service or healthcare research, actually was. The literature had also demonstrated that other professions undertake research that informs nursing theory and practice, for example psychologists and sociologists – I learned that many early studies into nursing and nurses were undertaken by these groups (Hopps 1994). (These groups were not included as the study was exploring nursing research activity by clinically-based nurses in the NHS.) I also was able to see that nurses may undertake research that may have more of a psychological or sociological basis: some of the mental health nurses were undertaking research which included psychological aspects of mental health care, for example.

This experience of talking to interviewees and reading the literature led me to revisit my definition and review how I used the term 'nursing research'. The
definition that I used for nursing research was therefore clarified and changed on the basis of the literature review and as a result of these initial interviews to ‘research that generates knowledge to inform nursing practice and/or nursing theory’. This, in turn, helped define more clearly which nurses to interview: only clinically-based nurses who were undertaking research that informed nursing practice and/or theory were then interviewed. This meant that clinical trials research nurses, for example, were not interviewed unless they were also carrying out research to inform nursing practice or theory; in practice I was only able to locate a few oncology CTRNs in one trust who were doing this, as discussed in Chapter 8 (see page 333). In-depth information was therefore sought about the experiences and perceptions of nurses undertaking research to inform nursing practice and/or theory, and about the organisational support systems in place for these nurses.

Thompson (2000) claimed that one reason for the vulnerability of pure NR was the broad, eclectic nature of NR and the variety of methodological approaches used by nurses to investigate nursing questions: this was seen as necessary to address the complexity of nursing but open to criticism in that nursing research cannot be narrowly defined or aligned to certain research paradigms. Nursing research has not been able to be associated with, and develop and refine the use of, one particular methodology or paradigm in the way that medicine has been with randomised controlled trials, for example, or anthropology has done with ethnography. This may also be a factor attributing to the perceptions of some of those interviewed that research by nurses was ‘healthcare research’ as opposed to ‘nursing research’: the complexity of nursing precludes a narrow, recognisable
research approach that other disciplines have been able to adopt and therefore makes nursing research less easy to categorise and identify.

This lack of particular methods or paradigms in NR has been debated by nurse academics, as was discussed in Chapter 5. Thompson (2000) outlined three research approaches - positivist, interpretive and critical or emancipatory - and was of the opinion that all have their place in NR, as were Randell (1992), Tierney (2003) and Stevenson (1988). Past debates over research paradigms, schisms between quantitative, positivistic researchers and those aligned to an interpretive paradigm were seen by these researchers as futile and damaging. However, others thought that positivistic approaches were not in nursing's best interests in view of the practice-base of the profession, which they saw as lending itself more to practice-based interpretive or critical approaches: they recommended that nursing should identify and develop its own specific methods (Newman 1994, Maggs 1997, Rolfe 1998).

One way forward for nursing to establish itself as having a particular research paradigm could be the alignment of NR to these practice-based approaches; this might help to raise the profile and credibility both within the profession and with other disciplines, if advanced levels of expertise were built up in these specific areas. This is not, however, without risk: the literature review highlighted that many considered that pure research was needed to define nursing and provide a theoretical knowledge base, and Lehtinen et al. (2005) argued that pure research leads to other valuable ideas and novel research questions; and nursing should not abandon this, just because it is a practice-based discipline. However, as more clinically-based nurses undertake NR, it is highly probably that the research will
increasingly address problems identified in practice, in order to inform and improve nursing practice. Nursing therefore has an opportunity to expand and advance practice-focused, evaluative studies, whilst at the same time continuing to study theoretical nursing concepts to inform the theoretical nursing knowledge base via other research approaches. This may also be helped if the StLaR recommendations (Butterworth et al. 2005) are adopted to provide a clinical research career structure.

In summary, the literature review and interview processes helped me to reflect and to re-define my original definition of the term ‘nursing research’, which I had found to be lacking in focus and not specific enough to address the research questions or identify suitable participants. The subsequent redefinition enabled me to undertake the research with a well-defined concept that I was then able to explore in depth.

**Use of data in case study research**

The research was planned to be flexible in terms of the nature of data collected within organisations, and a variety of sources of data was anticipated when the study was designed. The exact nature of data that would be relevant was not known precisely, but the most likely types were seen as interviews, informal observation and document analysis. This was anticipated as I was shadowing key people in some trusts and interviewing specific groups in all trusts, and thought that all organisations would have documents such as R&D strategies that mentioned nursing research activity.
Whilst the fieldwork was in progress, however, it quickly became apparent that interviews would yield the bulk of the data collected and reported in the thesis. This was for several reasons. With regard to document analysis, two organisations (JAM and HDM) did not have R&D strategies, but were in the process of developing these. The remaining three organisations had annual R&D strategies that in the main concentrated on medical research priorities – each of these organisations were developing research portfolios that concentrated on specific biomedical areas or programmes of research, for example biomedical sciences, oncology, genetics. This was linked to gaining NHS R&D funding as outlined in the Clarke Report (DoH 1999c), and to the annual research reports that each trust compiled for this purpose. Nursing research was not a feature in these documents, although they did outline briefly the work of the R&D departments and RDSUs. Only two trusts had a NR strategy in place: these were brief documents, on one or two sides of A4 paper, that concentrated more on the ‘D’ aspect of R&D - the EBP agenda and utilisation of research - than on primary research activity. Documents from the R&D departments revolved around the research governance framework (DoH 2001a): most were in the process of establishing procedures and systems, and were producing leaflets and policies for this. These were generic for all research in the organisations. Therefore, there was very little documentation from which to collect data.

The informal observation enabled me to gain an overview of the work of NR facilitators, and 'shadow' them in their roles. Much of this work was also concerned with the 'D' arm of R&D: practice development, drawing up protocols for care, advising on EBP. It was quickly seen that, with regard to the research aspect of their posts, they mainly acted as facilitators to inform nurses undertaking research
of the best places within the organisation to go for advice and help. They did not directly support or advise staff undertaking research, and did not feel this was part of their role: they did not feel qualified to give specific advice on research methodology or processes but would inform nurses as to where they could get help with these aspects.

The informal observation and use of documents at the beginning of the fieldwork quickly enabled an outline profile of each organisation to be built up. However, as the interviews proceeded, I realised that far more in-depth information about trust policies and procedures was being obtained by interviewing relevant groups. For example, the R&D managers were able to give specific details about the amount of R&D funds they were allocated, the number of NR projects on their databases, and the work of the R&D and RDSU departments in supporting nurses doing research. The lead nurses and individual nurses undertaking research provided data about opportunities and application procedures for nurses wishing to study for Master's awards and trust support systems for nurses, and the NR facilitators detailed their role in NR facilitation. Nurse consultants and nurse researchers were able to give their perceptions and experiences of undertaking research, and provided detailed information about the nature of the support available to them, structures in the trusts for this and their use of these.

In view of this it was decided, in conjunction with supervisors, to concentrate on collecting interview data as this was providing the richest source of information and, whilst initial weeks in trusts were spent shadowing NR facilitators and others where appropriate, subsequent visits focused on carrying out the interviews.
Case study research is flexible and allows researchers to use the methods best suited to the research question as it allows for the use of a variety of data collection methods (Jones and Lyons 2004). It was therefore acceptable to concentrate on this particular method for the remaining period of data collection. Bowling (1997) sees case study approaches as characterised by interviews, with the use of documents and observation where appropriate: this was the case in the present study. The observational data and information from documents were used to corroborate and augment the interview data; this is an approach advocated by Yin (1994) and involved looking for ways in which it supported or illuminated aspects of the interview data (Vallis and Tierney 1999/2000). This resulted in the compilation of 'chains of evidence' (Yin 2003 p105), where results from the interview data were supported by results from other data; this therefore added to the dependability of the study (Tobin and Begley 2004) (see page 192 for specific examples). The presentation of actual data in this thesis therefore reflects what actually happened in the field: the most in-depth, relevant data was gained from the interviews and other data sources were of limited use in building up detailed profiles of organisations and the concept of NR activity in these.

When reflecting on the research fieldwork, it was apparent that much time was spent in the early stages collecting information that did not turn out to be of direct relevance to the research, known as 'dross' (Burnard 1995, Field and Morse 1985), as outlined on page 190. At the start of the study, everything was collected that was seen as potentially useful, such as minutes of meetings, RG pamphlets, annual R&D reports, and so on. Much of this was found to be background information only. If I were undertaking the research now I would be more careful about the type of information collected; the process of undertaking the research
has taught me how to be more selective. However, I would still plan to use a variety of data sources when designing research using a case study approach; until the fieldwork is commenced it is not possible to predict which sources will provide the richest or most relevant data. Provision needs to be made to examine a number of potential data sources and then select the most appropriate ones. This is an advantage of the case study approach; it allows for the flexibility required to meet the objectives of the study (Jones and Lyons 2004).

In conclusion, conducting the fieldwork led to the revision of the main source of data that was used for the study. The use of case study research allowed for such flexibility, and this has been reflected in the presentation of the thesis.

The inductive process
When deciding on the means of data analysis suitable for the inductive approach used in Phase 2 of the research, two main options were considered. The Framework approach was eventually chosen as it provided a structured, transparent approach, was suited to policy-related research, and was suitable for an inductive approach as it is designed for the generation of theory (Ritchie and Spencer 1994). (See Chapter 6 for a thorough discussion of the Framework approach.)

The other main analytical tool that was considered was grounded theory. This was first used in the 1960s by Glaser and Strauss, who were sociologists working together on research about health professionals’ interactions with dying patients and resulted in the publication of the classic text ‘The Discovery of Grounded Theory’ (Glaser and Strauss 1967). It was developed to provide a systematic
process for generating theory and achieve scientific respectability for qualitative research (Smith and Biley 1997). The approach has been clarified over time and has been very popular in nursing research: Corbin (1987), Melia (1987) and Smith (1992) are some of the nurse researchers who have used it. The theory is derived from symbolic interactionism, which focuses on the processes of interaction between people by exploring human behaviour and social roles (Blumer 1971), and stresses the importance of culture and the context in which people function (Holloway and Wheeler 1996).

One of the main features of GT is the generation of theory from the data, and it emphasises the development of ideas. It is especially useful when little research in the subject area has been completed (Smith and Biley 1997). Grounded theory incorporates a series of analytical steps and has seven key characteristics:

- Theoretical sensitivity
- Theoretical sampling
- Constant comparative analysis
- Coding and categorising data
- Theoretical memos and diagrams
- Literature as a source of data
- Integration of theory (McCann and Clark 2003 p10).

The research question is identified, and data collection and analysis are done simultaneously. Theoretical sensitivity relates to the ability to have insight, understand and give meaning to data. Theoretical sampling involves collecting initial data, analysing this, and collecting new data to compare to emerging categories, a process known as constant comparative analysis as data are
collected and analysed simultaneously (Smith and Biley 1997). Sampling continues until 'theoretical saturation' is reached (McCann and Clark 2003 p11) and no new categories are emerging. Data are coded in three stages using open, axial and selective coding. Open coding breaks data down into discrete parts, axial coding puts data back together in a different way by categorising them and making links between a category and its subcategories (Carpenter 1995), a process which involves both inductive and deductive thinking (McCann and Clark 2003). Selective coding aims to identify a core or overarching category and attempts to link this with other categories (Charmaz 1990). This may involve using memos and diagrams, and the aim is to put data back into an integrated, meaningful whole.

The main literature review is undertaken towards the end of the process (although a preliminary review may be taken prior to data collection to justify the need for the study (McCann and Clark 2003)). The main review links existing research with the emerging theory, and literature that supports or extends the proposed theory is interwoven with empirical data in order to establish a connection between theory and reality (Hutchinson 1986).

As discussed on page 160, grounded theory was examined but not thought appropriate for several reasons. These were:

- The pre-existing work that had been undertaken in Phase 1, which informed the second phase and provided some background theoretical knowledge
- The level of knowledge obtained from the literature already reviewed
- The need for the constant comparative method of data analysis (Bowling 1997) for grounded theory.
The need for constant comparison was the main difficulty. This was extremely
difficult to effect in practice as organisations were to be visited at irregular periods,
and the groups interviewed within these periods depended on access to
participants at those given time periods. This made it very difficult to continually
analyse data from one group of participants, as interviews at each visit were with
people from more than one group but did not always include members of every
group.

As the analytical process proceeded, however, it became possible to see how the
research could have used a GT approach. If I had been able to undertake the
research full-time, and base myself in organisations for several months at a time,
constant comparison would have been possible.

When using the Framework approach, however, I found that several aspects had
close similarities to GT: I was able to provide a theoretical sensitivity by immersing
myself in the organisations and giving meaning to the data as they were collected.
Some of the sampling was theoretical: with the group of nurse researchers, I
carried on interviewing until no new data were appearing; this was possible as it
was a large sample, and as more interviews were undertaken I became adept at
recognising the key terms and phrases that came up repeatedly, even though
analysis was not done concurrently. (However, if I had been able to undertake the
research full-time and use the constant comparative method, this might have
meant that I needed to interview fewer nurses, as saturation might have been
achieved earlier.)
When planning the research I initially thought that the other groups were not large enough for this to happen: for example, there were few lead nurses and R&D managers in each trust, and in total only seven lead nurses and ten R&D managers were located and interviewed in all five trusts. However, as the analysis progressed, it emerged that most themes were relevant for several groups. Only two were isolated to individual groups (see Figure 7.4 page 222), and this altered the direction of the research in that an overall thematic framework was devised and a global model was constructed of factors influencing NR. This overall integration of theory is also a feature of GT.

When coding the interview data, transcripts were reviewed in a similar manner to the three coding stages of GT. Initially the data were reduced and broken down into discrete parts, and imagery was used to give meaning to them, a technique also relevant to GT (Strauss 1987, Holloway and Wheeler 1996); this was therefore a process similar to open coding. Categories and subcategories (the latter were referred to as dimensions in the present study) were identified, as can be seen in Chapter 7 in the thematic framework tables. This process mirrored the axial coding of GT. The process of constructing an overall thematic framework (Table 7.9 pages 223-225) also had similarities to the selective coding process of GT in that it put the data into a meaningful whole.

The Framework approach also used the mapping of concepts using charts and diagrams to aid theory development and integration, which is a feature of GT. As seen in the thesis, many charts were constructed during the analysis, and this helped to clarify concepts and themes and identify relationships. I did not use
memos to abstract theory, as in GT, but I did use a reflective log, at key stages as the analysis progressed, to clarify my decisions and thought processes.

When Phase 2 of the study was planned, existing literature had been reviewed and some theoretical background had been obtained. In reflecting on this, I was able to see that, in practice, only a very limited amount of primary research literature existed at this time, and I had not used it to develop theories relating to the second phase of the study. With regard to the literature reviewed for Phase 2, in Chapter 5 of the thesis, the bulk of this was critically appraised towards the end of the research, and was related to the results after analysis had taken place. This was not planned deliberately – much of the literature was collected and read as it was released, over the lifetime of the project, but detailed appraisal was not undertaken until the final stages. This was due to the prolonged period of fieldwork over a two-year period (due to undertaking the research part-time): I decided to concentrate on completing the data collection before thoroughly reviewing the literature. I found that, when undertaking the detailed review, I was able to quickly relate it to the key themes and concepts from the analysis and use it to support and illuminate the results. This process also, therefore, had similarities to GT, when the main literature review is undertaken after data are analysed.

My main conclusions from reflection on the research analysis are that grounded theory would have been a very a suitable approach to use if the research had been undertaken full-time and the data collection could have been strategically planned rather than having to be serendipitous and to depend of staff availability coinciding with my visits. It also appears that many of the techniques used in the Framework approach and GT were very similar: both approaches use a structured
approach that ensures transparency and rigour, and many stages share some features. The Framework approach, in addition, provided a formal charting stage where themes were entered onto spreadsheets. This enabled very clear comparisons to be made, and made easy the transfer of data in order to analyse separate data sets, and then undertake the single case and cross-case analyses, which are key features of Type 4 case studies. Grounded theory may not offer such a structured approach to this complex part of case study data analysis, but it would provide a well-established approach that is 'tried and tested' in many differing research disciplines.

**Presentation of the recommendations to NHS trusts**
At the beginning of this chapter, when reflecting on the limitations of the study, it was highlighted that some of the recommendations are related to national policy and partnership working with HEIs, which are beyond the remit of individual organisations to address on their own. This has also been discussed in detail in Chapter 8, where the practicalities of achieving change are debated (see pages 368-372). When feeding back results to trusts, it will be important to relate these to the organisation's particular individual needs, and to report specifically on the areas where change is achievable.

In order to do this, individual reports are being compiled for trusts giving results specific to the organisation, along with a brief overview of the findings of the research as a whole in order for them to see how their organisation has contributed to the overall study. (Names of other participating organisations will not be reported and, if quotations are used, they will be carefully selected and the designations of the individuals will not be given, to preserve confidentiality and
anonymity.) Individual strengths of the organisational approach will be highlighted and possible areas for development discussed.

As part of this process, five new tables will be compiled, one for each organisation, adapted from Table 8.1 (see pages 365-368). The main recommendations that affect individual organisations will be transposed onto a new table. These will primarily be those that trusts can address internally, and practical ways will be suggested in which the recommendations can be implemented based on the findings of the study. As seen on page 363, these will mostly revolve around internal support systems within the organisation.

The recommendations for national policy will be briefly referred to, but the difficulties of achieving a policy change will be emphasised as outside the organisation's immediate sphere of control and will be summarised for information only.

With regard to partnership working with HEIs, the recommendations will be provided but the possible difficulties in achieving this will also be presented. Individual organisations will have to then review whether it is feasible to take this agenda forward, and decide on processes to do this. Examples from the literature of how other organisations have done this will be provided, with the appropriate literature referenced, so that trusts can also appraise the effectiveness of these projects and use the findings if appropriate.

It is anticipated that I will also present the results to the organisation orally: I will offer to present the results and hope that they will all wish me to do this. The
format for this will be discussed with trusts, but the presentation may be to one or two key staff, or to a wider audience; for example trusts may want to organise a seminar format for interested staff, which would then enable anyone who participated in the research to attend.

It is hoped that presenting the results in this format will enable organisations to identify their strengths, and also identify achievable areas for improvement without feeling overwhelmed by the amount of information that was produced overall from the study.

Conclusions from the reflection on the thesis

This chapter has identified some key aspects of the overall research programme, and I have reflected on these.

The overall strengths and limitations of the study have been discussed and I have reflected on alternative actions that I would take, as a result of the learning process and my development as a researcher, if undertaking the research again.

The process of defining and re-defining the term 'nursing research' as used in the study has been described, and the perceived vulnerability of NR debated. In addition, the advantages and disadvantages of nursing research aligning itself to a particular research paradigm have been reflected on.

The presentation of the thesis, with the emphasis on interview data, has been discussed in depth, with the progress of the research and the decision-making
processes that were made as a result of the research findings outlined, in order to demonstrate why the bulk of the data collected were interview data.

The inductive processes were also discussed in the light of a grounded theory approach, as the inductive processes used with the Framework approach can be related to many of those used in GT. The limitations of the study, which were initially seen as precluding the use of GT in the planning stages, were reflected on in the light of how the research actually progressed, and the advantages and disadvantages of both approaches considered.

Finally, consideration was given to reporting of results to individual NHS trusts, and the format of this discussed, in order to reflect on the most appropriate way to appraise trusts of their individual results and provide recommendations as to how they can strengthen existing systems.

In conclusion, this reflective chapter has enabled various sections of the thesis to be examined in more depth, in order to clarify particular areas of the research and further reflect on the decision-making processes used in the study.
APPENDIX 1

University of Plymouth ethics approval

Confirmation letter of approval
Ms Val Woodward  
Institute of Health Studies  
Reynolds Building  

Ref: HESC/I/EthApp/MS/clc  
Date: 12 March 2001  

Dear Val  

Title: An Evaluation of NHS Nursing Research Strategies in the South West  

I am pleased to confirm that your application for ethical approval has been approved by the Faculty of Human Sciences: Human Ethics Sub-Committee.  

Approval is for the duration of the project or, in the case of programmes for three years.  

Yours sincerely  

Professor Michael Sheppard  
Chair Faculty of Human Sciences  
Human Ethics Sub-Committee
APPENDIX 2

Multi-centre research ethics approval

Confirmation letter of approval
Dear Mrs Woodward

Re: MREC/01/6/98: Evaluating nursing research strategies in the South West NHS region.

The South West MREC reviewed your application on 8 November 2001.

Following amendment of the documentation the members of the MREC have agreed that there is no objection on ethical grounds to the proposed study. I am, therefore, happy to give you our approval on the understanding that you will follow the conditions of approval set down below. The project must be started within three years of the date on which MREC approval is given. The following documents have been approved:

- Appendix 1 - Interview Agenda-Phase 3 (Version 1 October 2001).
- Appendix 2 - Consent Form (version 2 November 2001).
- Appendix 4 - Guidelines for obtaining consent for a period of formal observation (Version 1 October 2001).

While undertaking the review of your application the MREC noted the research involves no patient contact. For this reason you are not required to notify any LRECs when undertaking this research.

MREC Conditions of Approval

- The protocol approved by the MREC is followed and any changes to the protocol are undertaken only after MREC approval.
• If projects are approved before funding is received, the MREC must see, and approve, any major changes made by the funding body. The MREC would expect to see a copy of the final questionnaire before it is used.

• You must complete and return to the MREC the annual review form once a year, and the final report form when your research is completed.

Legal and Regulatory Requirements

It remains your responsibility to ensure in the subsequent collection, storage or use of data or research sample you are not contravening the legal or regulatory requirements of any part of the UK in which the research material is collected, stored or used. If data is transferred outside the UK you should be aware of the requirements of the Data Protection Act 1998.

ICH GCP Compliance

The MRECs are fully compliant with the International Conference on Harmonisation / Good Clinical Practice (ICH GCP) Guidelines for the Conduct of Trials Involving the Participation of Human Subjects as they relate to the responsibilities, composition, function, operations and records of an Independent Ethics Committee/Independent Review Board. To this end it undertakes to adhere as far as is consistent with its Constitution, to the relevant clauses of the ICH Harmonised Tripartite Guideline for Good Clinical Practice, adopted by the Commission of the European Union on 17 January 1997. The Standing Orders and a Statement of Compliance are available on request or on the Internet at http://www.corec.org.uk.

Yours sincerely

Barrie Behenna
Chairman
APPENDIX 3

Example of one framework chart

Results by group. Nurse researchers: individual influences
<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
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<tbody>
<tr>
<td>1</td>
<td>RESPONDENT</td>
<td>MOTIVATION</td>
<td>PERSONAL SACRIFICES</td>
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<td></td>
<td>PDM</td>
<td>Paediatric research nurse for parental</td>
<td>Needed to achieve awards and undertake</td>
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<td>satisfaction nursing study</td>
<td>research Doesn't like the insecurity of</td>
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<td>fixed term contract which 'puts me off'</td>
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<td>Part of award/job Not for award - but</td>
<td>pursuing this as a career. This limits</td>
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<td>is concurrently doing a</td>
<td>opportunities to develop as a researcher.</td>
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<td>distance learning BSc &amp; this helps her</td>
<td>Developing as a researcher also means</td>
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<td>with content and critical</td>
<td>'losing clinical skills' which she doesn't</td>
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<td>appraisal skills needed for the degree.</td>
<td>want to do. Extent of sacrifice not</td>
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<td></td>
<td>Part of her job. Career</td>
<td>realised by</td>
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<td>progression Wanted to 'gain another</td>
<td>trust/managers/colleagues/HEI</td>
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<td>set of skills that will make</td>
<td>Workload is 'relentless' on the project</td>
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<td>myself more adaptable to other roles'.</td>
<td>and there is</td>
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<td>But feels opportunities for a</td>
<td>'less variation' than her everyday job.</td>
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<td>research career in her clinical area</td>
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<td>limited. Own Interest - but</td>
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<td>'it's difficult to maintain the same</td>
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<td>level of enthusiasm all the time'.</td>
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<td>Has enjoyed the experience. Need to</td>
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<td>prove something</td>
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<td>Evaluation of practice 'I feel I'm</td>
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<td>making a significant contribution</td>
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<td>to patient care and if that's not</td>
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<td>being a proper nurse, I don't know</td>
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<td>what is.' Desire for change Autonomy</td>
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<td>Logical next step</td>
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<td>2</td>
<td>PDM</td>
<td>Researcher/practitioner, eye hospital</td>
<td>Needed to achieve awards and undertake</td>
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<td></td>
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<td>(has MSc)</td>
<td>research Extent of sacrifice not</td>
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<td>realised by</td>
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<td>Part of award/job Already has her</td>
<td>trust/managers/colleagues/HEI</td>
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<td>master's degree but is part of</td>
<td>Workload is 'relentless' on the project</td>
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<td>her post. Career progression Yes -</td>
<td>and there is</td>
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<td>from LP to RP. But finds it</td>
<td>'less variation' than her everyday job.</td>
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<td>strange that she is only paid at</td>
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<td>lecturer level as 'some senior</td>
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<td>lecturers don't do research'. Own</td>
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<td>Interest Prefers this post as more</td>
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<td>time for the research than when she</td>
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<td>was a LP. Need to prove something</td>
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<td>Feels she has 'credibility' in this</td>
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<td>post. Evaluation of practice All her</td>
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<td></td>
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<td>research is linked to practice</td>
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<td>development: 'Research is one way to</td>
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<td>do practice development'. For example,</td>
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<td>wants to undertake research to</td>
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<td>evaluate patients being able to book</td>
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<td>their own appointments and choose</td>
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<td>dates rather than being sent appts -</td>
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<td>feels this would reduce DNSAs and</td>
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<td>besuurocracy. Desire for change</td>
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<td>Autonomy: Enjoys the freedom of this</td>
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<td>role: 'I'm a very autonomous person'.</td>
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<td>Logical next step</td>
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<td>3</td>
<td>PDM</td>
<td>PhD student (F/T student at local HEI</td>
<td>Needed to achieve awards and undertake</td>
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<td></td>
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<td>doing research in trust on an honorary</td>
<td>research: No guarantee of employment at</td>
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<td></td>
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<td>contract)</td>
<td>the end of the research. Glad she did</td>
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<td>Part of award/job Yes - doing PhD</td>
<td>it full time but was a sacrifice: 'I</td>
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<td>F/T 8 months from completion. Career</td>
<td>sacrificed my</td>
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<td>progression 'That's the eternal</td>
<td>salary to do it full-time.' Extent of</td>
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<td>question that's running around in</td>
<td>sacrifice not realised by</td>
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<td>my head at the moment.' Is thinking</td>
<td>trust/managers/colleagues/HEI</td>
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<td>of post-doc opportunities such as</td>
<td>Workload is 'relentless' on the project</td>
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<td>funding &amp; other awards. Would like to</td>
<td>and there is</td>
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<td>become a nurse researcher in a trust</td>
<td>'less variation' than her everyday job.</td>
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<td>or go via the academic route. Doesn't</td>
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<td>want to go back into clinical practice.</td>
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<td>Own Interest 'I never really saw</td>
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<td>myself doing a PhD... It's just</td>
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<td>happened'. Need to prove something</td>
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<td>Evaluation of practice Desire for</td>
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<td>change Autonomy Logical next step</td>
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Framework chart. Results by group. Nurse researchers: individual influences
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<th>RESPONDENT</th>
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<td>1</td>
<td>TRUST 1</td>
<td>4. Part of award/job. Not specifically - but is a follow on from her PhD research and has implications for education in her post. Career progression: PhD happened early in her career. Would like a NC post - missed one which is now filled. She didn't apply but wishes she had. Wants to be in a post that 'bridges research and practice'. Own Interest: Yes - following on from her PhD work. Need to prove something. Evaluation of practice. Desire for change: Yes - wants to 'inspire people, rather than frighten them' about research. Autonomy: Logical next step: Yes - follow on from PhD.</td>
<td>Needed to achieve awards and undertake research. 'It leaves me with a hard dilemma really and it means I do a lot of the work in my own time which I do resent a little bit.' Extent of sacrifice not realised by trust/managers/colleagues/HEI. 'There's a big, I don't think I'd call it a stigma, but if I wanted time to go on a course... she would give me time... whereas when I wanted time to do this research properly and make it really watertight and credible, it's just 'Well it has got to fit in with the team and if you can... make time, fine.'</td>
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<td>5</td>
<td>PDM</td>
<td>5. Part of award/job. No. (Already has a first degree, wants to do a master's.) Career progression: Would like a nurse practitioner post; is not interested in management. Own Interest: Yes - followed on from an audit. 'I have this ability to ask questions.' Need to prove something. Evaluation of practice. See above re: audit. Desire for change: Autonomy: Logical next step.</td>
<td>Needed to achieve awards and undertake research. Extent of sacrifice not realised by trust/managers/colleagues/HEI. 'This puts me off doing research in this trust actually' (re: attitudes of line manager).</td>
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<tr>
<td>6</td>
<td>PDM</td>
<td>6. Part of award/job. Yes - completing education master's for LP post. Career progression: Yes - previously a G grade sister but now 0.6 WTE clinical + 0.4 SL. Own Interest: Need to prove something. Evaluation of practice. Education evaluation. Desire for change: Autonomy: Logical next step.</td>
<td>Needed to achieve awards and undertake research. Extent of sacrifice not realised by trust/managers/colleagues/HEI.</td>
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<td>7</td>
<td>PDM</td>
<td>7. Part of award/job. Yes - MA. Career progression: Own Interest: 'I've really enjoyed it because it's something that's mine.' Need to prove something. Evaluation of practice. Desire for change: Autonomy: Logical next step.</td>
<td>Needed to achieve awards and undertake research. 'I just get on and try and be organised because here takes up a lot of time so I try and get the balance right.' Extent of sacrifice not realised by trust/managers/colleagues/HEI. Feels she has an obligation to the trust now as they've given her time and funding.</td>
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<td>8</td>
<td>PDM</td>
<td>8. Part of award. Yes - MSc. Career progression: Own Interest: Need to prove something. Evaluation of practice. Desire for change: Autonomy: Logical next step. 'The MSc was the next logical step' after first degree.</td>
<td>Needed to achieve awards and undertake research. Very busy at work at time of dissertation which added to the stress caused by the ethics processes. Wouldn't do research on her own again - would consider being part of a team 'It would be less stressful for me.' Extent of sacrifice not realised by trust/managers/colleagues/HEI. 'I was doing long hours.'</td>
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<tr>
<td><strong>PDM</strong>&lt;br&gt;Senior Nurse, Cardiothoracics&lt;br&gt;10</td>
<td>Part of award - MSc in leadership &amp; organisation. 3 yr course. Career progression - Yes - in post 2 yrs, would like a NC post eventually. Own interest. Need to prove something. Evaluation of practice - Yes - AR project. Desire for change. Autonomy. Logistical next step - Finished first degree then moved on to masters.</td>
<td>Needed to achieve awards and undertake research. Extent of sacrifice not realised by trust/managers/colleagues/HEI.</td>
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<td><strong>PDM</strong>&lt;br&gt;Senior Lecturer/Rheumatology health professional + CNS rheumatology&lt;br&gt;10</td>
<td>Part of award/job - Yes, part of job but is also finishing her PhD. 'My 5 year programme plan is for three areas of research. The first area was about what is important to patients, in terms of service, issues and in terms of symptom management and outcomes. The next thing is to look at how we measure those outcomes, which reflect things that are important to patients... the third thing that I have to do is to look at what Health Professionals want to research into in terms of their own delivery and interventions.' Career progression: 'You tend to find that most research workers come up in through a strange route. Either through starting to do drug studies or some other bizarre route where they wanted to work part time for a bit, or a wife’s father got the job in there for them.' Own interest. Need to prove something. 'It was only after I was exposed to it that I thought, &quot;Oh they are doing a degree I could do a degree.&quot;' Evaluation of practice: 'All my research is patient based... that sort of research which is patient based and the primary focus is about what is important to the patient.' Desire</td>
<td>Needed to achieve awards and undertake research. 'If you are a one off researcher you will just look at it and be completely daunted and a number of people have said to me that they think that that is a government initiative. It is too obtuse you know to have one off lone projects being done... all the undergraduates no longer do research projects... so it's already having an effect.' Extent of sacrifice not realised by trust/managers/colleagues/HEI.</td>
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<tr>
<td>1</td>
<td>PDM</td>
<td>Part of award/job So the protocols by pass the surgeons, come straight to me, I will read them through and I will determine whether we can actually do this research, whether we have the skills and the ability and the time to do the research and I will review the resources to see whether the resources are available. I will sit down with the research fellow and develop that into a protocol and work out where we can get funding from... So I collect that information up and distribute it to the right people and help them with their application if they are going to do that.</td>
<td>Needed to achieve awards and undertake research Re: her MSc which was 'an MSc by research': 'I did a lot of the investigations, patients came back in the evening because I had to do the investigations after the NHS clinical sessions.' 'I finished that [in] 2000 but the, I mean, I probably started working on it in about 1996. I started working on it long before I registered it and I did it part time as well so obviously it takes longer.' 'You show me a nurse, you know not many, and I wouldn't give up my regular salary to do a piece of research and then not know that it is going to develop, you know, if I was guaranteed a good job when I came back.' Extent of sacrifice not realised by trust/managers/colleagues/HEI</td>
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<td>2</td>
<td>PDM</td>
<td>Part of award/job Yes - pilot study of project using for MSc but rest of project funded for 1 year. But after this she is out of a job. Career progression 'I would like to be a nurse consultant in cancer care or a nurse consultant in research you know I feel that they go hand in hand.' 'I am now more than qualified, over qualified in the post that I am in.' Own Interest Yes - got funding for a topic that interested her. Need to prove something Evaluation of practice Yes - parent satisfaction survey re: complementary therapy. Desire for change Autonomy Logical next step</td>
<td>Needed to achieve awards and undertake research 'I have been a H grade in the past and took a drop in salary to do my Masters Degree...' 'I have very typically, knowing me, have got on like an individual sort of doing it myself but then it is a replication of a study so that makes it easier.' Extent of sacrifice not realised by trust/managers/colleagues/HEI</td>
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Framework chart. Results by group. Nurse researchers: individual influences
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<td>1</td>
<td>RESPONDENT</td>
<td>NRCM 1. Paediatric Diabetic specialist nurse</td>
<td>Part of award/job: No, but now I was thinking about whether I could APEL it through or whether I could get it up towards some points towards a degree. &quot;I may go for a Masters I think I will jump the degree if I did anything I would go up to the Masters. So yes I need to look into that really because otherwise it is just lying there and I might as well get some points for it.&quot; Career progression Own interest. I spoke to him [NR coordinator] about getting a proposal together. Which we did and that was rejected and then we put another proposal together which was accepted...this went to region...which then second time round was accepted. We only got £2,000 and I then looked towards sponsorships and got another £2,000. 'I was really green doing research...so I was learning as I was going along...' I found it very very interesting as well and I really enjoyed a lot of it, the interviewing and things I enjoyed a lot talking to the adolescents.'</td>
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<td>14</td>
<td>Need to prove something...you know it's a feather in the hat...'...now I do feel proud that I did it. Evaluation of practice Yes was investigating a problem in clinical practice. Desire for change Wants to change practice as a result of findings. Autonomy Logical next step</td>
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<td>15</td>
<td>NRCM Post-doctoral research fellow</td>
<td>Part of award/job Yes - post-doctoral funded award Career progression Follow on from PhD NHSE studentship. Would like a NC post 'That's probably what I'd like... the nurse consultant role will probably be the next thing... it's nice to have a bit of career progression.' Own interest Need to prove something 'I didn't think I was particularly academic.' Evaluation of practice Desire for change Autonomy Logical next step Yes - from PhD</td>
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<td>16</td>
<td>Needed to achieve awards and undertake research 'I was so overworked I mean I used to fill every weekend doing it and this job is very hectic as well. So I think that is what happened to me, I got really overworked.'...well two months ago I said I would never do this again, ever, but looking at it now I would do it again if I had the right people working with me.' Extent of sacrifice not realised by trust/managers/colleagues/HEI 'It should have happened differently but he [R&amp;D manager] said if we look at it positively, you know, it's taught us a lot about what is needs to be in place...because I did say that very loudly... I had a meeting with [R&amp;D manager / NR coordinator] and I spat it out and said look you know, It's not on. It shouldn't happen like this because what it did to me at that time was, it would deter me from ever doing it again and I said that can't be the point of asking nurses to do research, you know, you should encourage them, motivate them, help them to do it.</td>
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<td>17</td>
<td>NRCM Clinical nurse manager, haematology/oncology + lead cancer nurse</td>
<td>Part of award/job New posts will have a session built in per week. Career progression own interest Need to prove something Evaluation of practice Will be able to address nursing issues for patients involved in RCTs. Desire for change Autonomy Logical next step</td>
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<td>18</td>
<td>NRCM Solid tumour research nurse (G grade)</td>
<td>Part of award/job Yes - part of her remit as a CTN - has 1 session per wk for NR - on the team of interviewee 2:3 above. Career progression Own interest Was 'a bit bored' with last post. Interested in research 'I'm still learning all the time'. Need to prove something Evaluation of practice Proposed project evaluating pts experiences. Desire for change Wanted something 'different' (prev was a chemotherapy nurse &amp; in cancer nursing in London) Autonomy Wanted to work 'a bit more independently' ad likes the independence 'I find it a very rewarding position.' Logical next step</td>
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<tr>
<td>19</td>
<td>NRCM Haematology research nurse (G grade)</td>
<td>Part of award/job Yes - part of her remit as a CTN - has 1 session per wk for NR - on the team of interviewee 2:3 above. I'm starting to enjoy it, that sounds awful, doesn't it, a year in. Career progression Would like to do a degree eventually and think about working as a CNS Own interest No previous research experience 'everything was like a foreign language.' has taken her 12 months to 'get her head round it all.' Need to prove something Evaluation of practice 'We have to be very careful of the kind of questions we formulate for research, that we're not just doing research for research's sake... I think patients' needs should come first.' Desire for change Autonomy Logical next step</td>
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<td>6</td>
<td>NRCM 6. Clinical Nurse Specialist, pain management</td>
<td>Part of award/job No Career progression Own interest Has been trying to set up research for past 4-5 years but is now lacking motivation as she is too busy with clinical demands. 'If I don’t push it forwards, nobody else will.’ Need to prove something Evaluation of practice Desire for change Autonomy Logical next step</td>
<td>Needed to achieve awards and undertake research ‘I feel there is support in the trust to take research forward but… a clause should be added into contracts about doing research and the amount of time quantified.’ ‘The clinical side is getting so busy now I cannot take the research forward.’ Extent of sacrifice not realised by trust/managers/colleagues/HEI ‘I don’t think they’ve got the time to really indulge me.’ (i.e. managers see research as an indulgence.)</td>
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<td>7</td>
<td>NRCM Senior Nurse, older people (Modern Matron)</td>
<td>Part of award/ job - MSc Also feels the research skills she’s developed are transferable to other fields. Career progression Own Interest Would love to do more research if she had the time. Enjoyed the data collection which she found ‘fascinating’ For example when observing practice she noticed things she had never noticed before such as noise: ‘It was like trying to run a ward in the middle of the M25’. Need to prove something Evaluation of practice Research topic was on an area of practice she felt needed investigation - management of bowel care in acute settings. Desire for change Autonomy Logical next step</td>
<td>Needed to achieve awards and undertake research ‘If it’s in your job description then it’s a lot easier.’ Extent of sacrifice not realised by trust/managers/colleagues/HEI</td>
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<td>8</td>
<td>NRCM Health advisor in GUM clinic (was previously a clinical nurse manager)</td>
<td>Part of award/job ‘Yes - MSc Career progression Own interest ‘Part of the degree was philosophy. It changed my life completely. I learned to think in a different way.’ Wanted to do some research so ‘listened in’ on a couple of lectures in a research module ‘and I was hooked.’ ‘It was the research that I wanted to do.’ ‘I’m now doing a degree in Fine Art, and the principles are the same.’ Need to prove something ‘Why do a BSc when I can do a MSc?’ Evaluation of practice Desire for change Autonomy Logical next step</td>
<td>Needed to achieve awards and undertake research ‘Basically the house didn’t get cleaned for two years, my husband learned to do the shopping, the children learned to do their own ironing but basically I didn’t see them really for two years.’ Extent of sacrifice not realised by trust/managers/colleagues/HEI Some didn’t like it ‘when I was taking time off, even though it was really in my own time. That was a bit hard to take sometimes, because if you were working really hard and there were sarcastic comments being made, you felt a bit miserable.’</td>
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<td>NRCM</td>
<td>Part of award/job: Yes - PhD studentship full time. Career progression: Previously was a research midwife working on medical studies. Would like a midwifery consultant post 'If you're learning all these skills you can't possibly go back to where you were before.' Own interest: Need to prove something. Evaluation of practice: Desire for change. Autonomy: Logical next step: Already has an MSc; when it was suggested she realised she wanted to do it.</td>
<td>Needed to achieve awards and undertake research: 'people can't be expected to work full time and then conduct good quality research.' Extent of sacrifice not realised by trust/managers/colleagues/HEI.</td>
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<td>23</td>
<td>JAM</td>
<td>Part of award: Yes - MSc. Already has BSc. Career progression: Would like to have a midwifery consultant post - not interested in management. Thinks the MSc will provide the research skills he'll need for a LC post: 'I think I'm already halfway there.' Own interest: Trying to make his research in an area of personal interest. Need to prove something. Evaluation of practice: Desire for change. Autonomy: Logical next step: Already has BSc. 'You get into a habit almost. That was just the next thing.'</td>
<td>Needed to achieve awards and undertake research: Long periods of travel involved to HEI which is 'a nightmare.' Sometimes has a 3 hour journey for a 1 hour lecture. Extent of sacrifice not realised by trust/managers/colleagues/HEI.</td>
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<tr>
<td>24</td>
<td>JAM</td>
<td>Part of award: Yes - MSc in MH. Career progression: Would like to be a nurse consultant post - not interested in management. Thinks the MSc will provide the research skills he'll need for a LC post: 'I think I'm already halfway there.' Own interest: 'Trying to make his research in an area of personal interest. Need to prove something. Evaluation of practice: Desire for change. Autonomy: Logical next step: Already has BSc. 'You get into a habit almost. That was just the next thing.'</td>
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<td>25</td>
<td>JAM</td>
<td>Part of award: Yes - MSc in Health &amp; Social Care Improvement. Did not do a first degree - applied for this instead &amp; got a place. Career progression: Own interest: 'Personally it's been good to be out of psychiatry. I think it opens up the field for me.' Need to prove something. Evaluation of practice: Desire for change. Autonomy: Logical next step:</td>
<td>Needed to achieve awards and undertake research: Time at home is the main problem with 'lost weekends and evenings'. He works in a study centre or in the manager's office. Extent of sacrifice not realised by trust/managers/colleagues/HEI.</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>JAM</td>
<td>Part of award: Yes - MSc in Health &amp; Social Care Improvement. Did not do a first degree - applied for this instead &amp; got a place. Career progression: Own interest: 'Personally it's been good to be out of psychiatry. I think it opens up the field for me.' Need to prove something. Evaluation of practice: Desire for change. Autonomy: Logical next step:</td>
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</table>

Framework chart. Results by group. Nurse researchers: individual influences.
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<tr>
<th></th>
<th>RESPONDENT</th>
<th>MOTIVATION</th>
<th>PERSONAL SACRIFICES</th>
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<tbody>
<tr>
<td>1</td>
<td>JAM</td>
<td>Part of award Yes - MSc in MH. Career progression 'Eventually it will help my career.' 'Likes the concept of the NC posts which 'sounds attractive.' Or would consider a research post. Own Interest Yes - looking at therapists' perceptions of personality disorders 'these people are the odd ones out and are often discriminated against.' Need to prove something. Evaluation of practice Desire for change Autonomy Logical next step.</td>
<td>Needed to achieve awards and undertake research Has found it 'challenging': 'It does take up weekends, it does eat into your personal time much more than I'd imagined.' Extent of sacrifice not realised by trust/managers/colleagues/HEI.</td>
</tr>
<tr>
<td>27</td>
<td>JAM</td>
<td>Part of award/job Yes - doing MSc &amp; is in senior educational/staff development post. Career progression own Interest Need to prove something Evaluation of practice Desire for change Autonomy Logical next step.</td>
<td>Needed to achieve awards and undertake research Extent of sacrifice not realised by trust/managers/colleagues/HEI.</td>
</tr>
<tr>
<td>28</td>
<td>DNM</td>
<td>Part of award/job Yes - MSc. Career progression Yes - thinking about her career for 'when the children move on.' Own Interest Yes - gained an interest in further study when she was doing a management diploma. Need to prove something. Evaluation of practice Desire for change Autonomy Logical next step.</td>
<td>Needed to achieve awards and undertake research Would like to undertake more research but 'I don't think it is feasible at all' due to pressures of work/ family life. Has spent a 'huge amount' of her own time on the MSc especially general reading and writing her assignments. Extent of sacrifice not realised by trust/managers/colleagues/HEI Trust too tied up with targets 'We're pushing to meet targets.' and doesn't realise extent of time needed for R&amp;D. 'In an ideal world in this job I'd hold a research portfolio and it would become part of the culture of the trust, but that doesn't happen.'</td>
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<tr>
<td>29</td>
<td>DNM</td>
<td>Part of award/job Not for award but linked to job. Career progression Own Interest Yes: 'I just like doing it really.' Need to prove something. Evaluation of practice Desire for change Sees her own research as about changing practice. Autonomy Logical next step.</td>
<td>Needed to achieve awards and undertake research Extent of sacrifice not realised by trust/managers/colleagues/HEI.</td>
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Framework chart. Results by group. Nurse researchers: individual influences.
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<tr>
<th>A</th>
<th>MOTIVATION</th>
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<th>PERSONAL SACRIFICES</th>
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<tbody>
<tr>
<td>31</td>
<td>DNM</td>
<td>Lecturer-practitioner, NICU</td>
<td>Part of award/job Yes - masters programme. Career progression - 'I was getting very stale in my job.' - has since changed jobs. Own interest - Yes - it was 'something I wanted to do myself' and she was 'looking for a new avenue.' Need to prove something. Evaluation of practice. Looked at parent's perceptions of care. Desire for change. Autonomy. Logical next step</td>
</tr>
<tr>
<td>32</td>
<td>DNM</td>
<td>Clinical risk manager</td>
<td>Part of award/job Yes - MA. Career progression - 'Something new, new; promotion to manager from co-ordinator. MA has benefitted this - can current knowledge of NHS policy and the higher level of working. Own interest - 'It was something I wanted to do.' Hasn't got first degree - went to masters level from diploma. Wanted to do something 'that would stretch me a bit more.' Need to prove something. Evaluation of practice. Desire for change. Autonomy. Logical next step</td>
</tr>
<tr>
<td>33</td>
<td>DNM</td>
<td>Patient Advice and Liaison Service (PALS) manager</td>
<td>Part of award/job Yes - MA. Also need to do it 'for my job.' Career progression - Has changed jobs since she graduated from a senior nurse in the community (previously part of acute trust, now a PCT) to a manager in the acute trust. Own interest - undertaking research/ doing more: 'I did love it... I did enjoy the dissertation. If I could do something practically, that might suit.' Need to prove something. Evaluation of practice. Felt that there were issues in integration of health &amp; social care in the community that needed investigation. Desire for change. Autonomy. Logical next step</td>
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Framework chart. Results by group. Nurse researchers: individual influences.
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</thead>
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<tr>
<td>DNM Lecturer-practitioner, spinal unit</td>
<td>6. Part of award/job Yes - MA; PgDipEd part of award needed for job. Career progression. Would like a NC post where she is in a completely new role and able to 'develop in new ways.' Own interest. Need to prove something. Evaluation of practice. Desire for change. Autonomy. Logical next step.</td>
<td>Needed to achieve awards and undertake research. 'In an ideal world I'd like to do some clinical research, but I work.' Has handed in her dissertation &amp; is awaiting results: 'I'd almost forgotten, I'm enjoying myself so much 'cause I've finished it...' 'I knew it would take a long time but I wasn't prepared for how much.' Extent of sacrifice not realised by trust/managers/colleagues/HEI.</td>
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<tr>
<td>HDM District nurse/SPM</td>
<td>1. Part of award Yes - MSc. Career progression. Own interest. Need to prove something. Yes 'I never did very well at school... and dropped out of college,' as she got older she wanted to take up studying again: 'I've got a lot to prove actually, with the second language and everything.' Also wants to be 'one up' on the degree students she supports as a SPM - feels it will be good for her, the students and the service. Evaluation of practice. Yes - evaluation of new referral criteria &amp; practices. Desire for change. Autonomy. Logical next step.</td>
<td>Needed to achieve awards and undertake research. 'I find it difficult to cram it all in.' Finds it difficult/feels guilty when they are very short staffed to be away for the study day: 'it's always difficult for me to manage.' Extent of sacrifice not realised by trust/managers/colleagues/HEI.</td>
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<td>HDM HV, Sure Start</td>
<td>2. Part of award/job Yes - MSc in health psychology. Career progression. Now feels demotivated in terms of career development: 'I feel like I'm waiting around for them all to catch up with me, which is very depressing really.' Own interest. Yes - had 1st degree in psychology &amp; was interested in furthering this. Need to prove something. Evaluation of practice. Desire for change. Autonomy. Logical next step. Yes - after 1st degree.</td>
<td>Needed to achieve awards and undertake research. 'You had to give a lot of your own time.' 'I feel aggrieved that I should actually do it in my own time, and I don't want to anymore.' 'I was prepared to go without other things in order to fund my academic progression.' Extent of sacrifice not realised by trust/managers/colleagues/HEI. 'It's so hard to do it that you can't just leave it; you can't just sort of hope that someone will be there to support you because it's just not there. It's really just not there.' Trust needs a clear pathway that people can follow: 'All the managers should have a knowledge about how you do these things.'</td>
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<td>HDM Health Visitor, board member - lead for HVs and nurses on clinical executive committee</td>
<td>3. Part of award/job Yes; MSc. Career progression. Own interest. Yes - did work on empowering staff. Need to prove something. Evaluation of practice. Desire for change. Autonomy. Logical next step.</td>
<td>Needed to achieve awards and undertake research. 'Was ill for six months and had to extend - completed over three years. 'I almost, kind of, felt guilty, and I don't think I'm alone in that, of actually taking the time out.' 'It takes a lot more of your time and energy than one day per week.' Extent of sacrifice not realised by trust/managers/colleagues/HEI. 'Nobody ever asked me, 'How are you getting on, how are you doing?', or took an interest in it.'</td>
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Framework chart. Results by group. Nurse researchers: individual influences
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<th>RESPONDENT</th>
<th>MOTIVATION</th>
<th>PERSONAL SACRIFICES</th>
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<tbody>
<tr>
<td>1</td>
<td>HDM</td>
<td>Part of award/job Career progression Own Interest Planned research for own interest and if successful, may use it as a means of progression to MPhil/PhD. Need to prove something That he can carry out research - not done for MSc. Evaluation of practice Yes - wants 'to change or validate practice' Desire for change See above Autonomy Logical next step Yes- regrets that his masters did not have a research project, wants 'to develop my skills' and is considering an MPhil/PhD.</td>
<td>Needed to achieve awards and undertake research He completed early - 18 months instead of 2-3 years - but 'I was only working three days a week at that point, so I knew I had time to do it.' Now is aware of time difficulties: 'That's the problem I've got...cause it's now down to me... All the work keeps coming in instead.' Extent of sacrifice not realised by trust/managers/collleagues/HEI</td>
</tr>
<tr>
<td>38</td>
<td>HDM</td>
<td>Part of award/job No - hasn't got a first or higher degree. Career progression Own Interest Yes - working with psychologist who is leading the project. Previously got involved with HONOS to evaluate practice &amp; found research interesting. Would like to develop academic studies now as a result of his involvement. Need to prove something Evaluation of practice Yes - evaluation of new services &amp; existing practice. Keen to demonstrate that what he does 'works'. Desire for change Autonomy Logical next step</td>
<td>Needed to achieve awards and undertake research Extent of sacrifice not realised by trust/managers/collleagues/HEI</td>
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<tr>
<td>39</td>
<td>HDM</td>
<td>Part of award Yes - MSc Career progression Own Interest Yes - always looking to go forward with his study (see comments under manipulation in theme NHS Influences) Need to prove something Evaluation of practice Yes - is a quality improvement masters. Desire for change Autonomy Logical next step Yes - has a BSc, looking for next educational step. Considering MPhil/PhD in the future.</td>
<td>Needed to achieve awards and undertake research Feels de-motivated by long ethical &amp; RG approval processes as they have set his schedule back. 'Juggling becomes a considerable part of the process.' He copes with this by 'becoming selfish... I will focus on what I need to focus on.' Extent of sacrifice not realised by trust/managers/collleagues/HEI 'There are times when I don't feel there is an understanding of the reality from managers about what this is about. They are target focused, they are focused on what the needs of the organisation are... maintaining some form of study time is particularly difficult.' &quot;The managers need to get their head round some of this stuff about research and research time...&quot;</td>
</tr>
</tbody>
</table>

Framework chart. Results by group. Nurse researchers: individual influences
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Nurse consultants: their characteristics and achievements

Aim. This paper reports one aspect of a larger study of nursing research strategies in one English region, focusing particularly on nurse consultants’ characteristics and achievements in the role.

Background. Nurse consultant posts have only been established in the United Kingdom since 1999 and, although much comment has appeared in the professional literature, there is very little research-based evidence of how the roles are developing. The role is intended to integrate four domains: expert practice; professional leadership and consultancy; education, training and development; and practice and service development.

Design. A cross-sectional design, using a convenience sample, was adopted.

Methods. Ten nurse consultants working in a variety of settings and specialties participated in in-depth, tape-recorded interviews. The data were analysed using the Framework approach.

Results. Four themes were identified from the data: characteristics of the postholder, role achievement, support systems and National Health Service influences. The first two themes are discussed in this paper and the data show that the nurse consultants varied in terms of their academic background and previous experience. Not all had the recommended minimum of Master’s degree level preparation and some had limited research experience. These background characteristics seemed to influence the degree to which they were able to achieve the four domains of the role, with those with lower qualifications and from a mental health background appearing to struggle most.

Conclusions. New appointments to these roles should only be made when candidates possess the recommended levels of educational preparation and professional experience of change management. It is also important that there is clarity about the scope of the role, which should not include management responsibilities. On-going research is essential to evaluate how the roles develop for postholders, the extent to which they fulfill policymakers’ expectations and what difference they make to patient care from a patient perspective.

Relevance to clinical practice. The findings show that holders of such posts need to have appropriate previous knowledge, skills and personal characteristics, as these
The first wave of NCs was appointed in VA's hip stay in a clinical role and perform a leadership and staff experience function, a practice and service development function, at present, research into the post and its translation into practice. Discussion advanced practice roles in nursing has been widely debated. The recent development of NC posts means that, since the initiation of NC roles, Daly and Carnwell (2003, p. 162) offer 'a framework for differentiating between elementary, specialist and advancing nursing practice'. However, the use of the term nurse practitioner, advanced nurse practitioner and nurse consultant interchangeably, and these constitute a single unified category in the framework. Thus, the paper offers no clarification of the role and level of practice of NCs.

The term Clinical Nurse Consultant (CNC) is used in Australian nursing career structures to describe a 'charge nurse' (Fitzgerald et al. 2003). This is an experienced Registered Nurse whose broad role is to provide clinical nursing leadership, facilitation of client-centred consultancy, planning and strategic direction for the specific patient care group, and development, provision and evaluation of educational programmes. The job description also includes implementation and evaluation of continuous quality improvement programmes in patient care and the initiation and conduct of research. CNCs usually have a specific nursing focus, such as infection control, continence promotion or diabetes education (D. Kralik, Personal communication, 21 May 2004). Recent evaluation of this role has not been reported in the literature.

Background

Because the NC role was established so recently in the UK, virtually no published research-based evaluation data are available. A search on the PubMed database (7 May 2004) using the term 'nurse consultant' produced 147 references, but almost all were news items, anecdotal reports, or non-research-based discussion papers.

Nurse consultant role definition

Nurse consultants have four essential domains to their role. Health Service Circular 1999/217 (DoH 1999b) states that 50% of the role should be practice based and should have an expert practice function, a practice and service development function, research and evaluation function, a professional leadership and consultancy function and an education, training and development function (DoH 1999b). Another factor was the need to provide a clinical career structure with financial rewards sufficient to encourage recruitment and retention. The need to encourage clinically experienced and expert nurses to stay in a clinical role and perform a leadership and staff development role rather than going into a managerial role to gain higher rewards and job satisfaction was also paramount.

Confusion in the terminology used in various countries to discuss advanced practice roles in nursing has been widely discussed in the literature (see, for example, Patterson & Haddad 1992, Castledine 1994, Snyder & Mirr 1995, Dunn 1997, Ketefian et al. 2001). Relating this to the UK situation since the initiation of NC roles, Daly and Carnwell (2003, p. 162) offer 'a framework for differentiating between elementary, specialist and advancing nursing practice'. However, they use the terms nurse practitioner, advanced nurse practitioner and nurse consultant interchangeably, and these constitute a single unified category in the framework. Thus, the paper offers no clarification of the role and level of practice of NCs.

The only systematic evaluation of the NC role in the UK so far reported is being carried out by a team at King's College London. At the time of writing, the final report is not available but preliminary findings have been reported. The first report (Redfern et al. 2003) covered all 158 NCs in post in February 2001. Data were collected using telephone interviews with a subsample of 32 NCs, including midwives (n = 4), health visitors (n = 3), and nurses specializing in care of adults or older people (n = 25), people with learning disabilities (n = 1) and people with mental health problems (n = 2). A role network analysis was conducted for 10 NCs and a questionnaire covering job control and complexity, clarity, conflict, workload and rewards, to which 153 (95%) responded. The results showed that NCs were challenged by work overload and role ambiguity, but reported that they were
coping with the complex role and felt professionally rewarded by it. Not all respondents were equally involved in all four dimensions of the role, although this changed as they ‘grew into’ the role. However, some NCs gave priority to particular dimensions at the expense of others. Involvement with patients averaged 44% of the working time, which is close to the 50% anticipated in planning documents (DoH 1999b). Not all NCs felt supported in their roles and Redfern et al. (2003) warn of the possibility of burnout and the need for good management support.

A second report was published on the project website (http://www.kcl.ac.uk/nursing/nru/nru_res_rep.html) in February 2003, but its findings are preliminary and may change as the work progresses to completion in 2004. This phase of the evaluation used a similar questionnaire to that reported in 2002. This was sent out in November 2002 and 368 usable responses were obtained (n = 448, 82.6%). The sample was comprised of 91.3% nurses, 7.1% midwives and four health visitors. A wide range of specialties was covered, including condition-related posts (e.g. cardiology, cancer care) and specialist areas (e.g. pain management, alcohol/substance abuse, tissue viability, critical care, accident and emergency care).

Again, there was variation in involvement in the four NC domains, with 87.5% reporting high involvement in leadership activities, but only 43.5% reporting high involvement in expert practice. Problems were again reported at this stage, with respondents agreeing or strongly agreeing with statements about heavy workload (55.7%) and stress at work (27.5%). However, high levels of such agreement were also reported for good professional development opportunities (77.5%), being satisfied with the job (72.8%), intending to stay in the job (81.5%) and the NHS (88.9%).

The results indicate that the aims of setting up NC posts, in terms of career structures, were being achieved, although levels of clinical involvement were below the anticipated 50% (DoH 1999b) and work pressures seemed high.

The study

The data reported here are part of a wider study investigating nursing research strategies in the clinical setting in the NHS using organizational case studies in five trusts in one region of England.

Aim

The aim of this part of the study was to explore the work of NCs, from their perspective and with particular reference to the research aspects.

Design

A qualitative design was used, with in-depth, unstructured individual interviews. Each interview was opened with a question such as: ‘Can you tell me about your role in the trust?’, and probes were used to explore particular issues that arose as the narratives unfolded. Interviews were tape-recorded and lasted on average 45 minutes.

Multi-centre Research Ethics Committee approval was obtained. A written information sheet was given to participants about the study, assuring confidentiality and anonymity of all information, with the right to refuse to participate or withdraw from the study at any time. Written consent was obtained from participants.

Ritchie and Spencer’s (1994) Framework technique was employed to organize and handle the data using Excel®

Table 1 Designation of nurse consultant and employing trust

<table>
<thead>
<tr>
<th>Designation</th>
<th>Setting</th>
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<tbody>
<tr>
<td>Nurse consultant, critical care</td>
<td>Teaching hospital 1</td>
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<tr>
<td>Nurse consultant, paediatric intensive care</td>
<td>Teaching hospital 1</td>
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<tr>
<td>Nurse consultant, cardiology</td>
<td>Teaching hospital 1</td>
</tr>
<tr>
<td>Nurse consultant, dermatology</td>
<td>District general hospital</td>
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<tr>
<td>Nurse consultant, psychological therapies</td>
<td>Mental health partnership trust*</td>
</tr>
<tr>
<td>Nurse consultant, accident and emergency mental health liaison 1</td>
<td>Mental health partnership trust</td>
</tr>
<tr>
<td>Nurse consultant, care of older people</td>
<td>Teaching hospital 1</td>
</tr>
<tr>
<td>Nurse consultant, stroke coordination, primary care</td>
<td>Teaching hospital 2 (in partnership with three local PCTs)</td>
</tr>
<tr>
<td>Nurse consultant, cancer care</td>
<td>Teaching hospital 1</td>
</tr>
<tr>
<td>Nurse consultant, accident and emergency mental health liaison 2</td>
<td>Mental health partnership trust</td>
</tr>
</tbody>
</table>

NHS, National Health Service; PCT, primary care trust.

*A partnership trust include both National Health Service and Social Services providers.
spreadsheets. Latent content analysis (Morse & Field 1996, Babbie 1998) was undertaken to identify themes within this framework.

The framework has five key stages: familiarization, identifying a thematic framework, indexing, charting and finally mapping and interpretation. Familiarization of the data involved gaining an overview of the research and immersion in the data by transcribing and listening to tapes and reading transcripts and notes made at the time of interview. Key ideas and recurrent themes were noted during this process. Identifying a thematic framework involved formalizing the key issues, themes and concepts identified in stage one and constructing a thematic framework or index which was continuously refined as more transcripts were reviewed. Indexing involved reading and annotating all the transcripts according to this framework and the charting process then 'lifted' the data from their original context and rearranged them according to themes using Excel® spreadsheets. This involved abstracting and synthesizing the data to provide summaries of respondents' views or experiences with references to original sources and appropriate quotations so that the source could be easily traced. Finally, the data were mapped and interpreted as a whole; concepts were defined, the range and nature of phenomena were mapped, explanations sought and recommendations developed.

Findings

Four major themes were identified: characteristics of the postholder, role achievement, support systems and NHS influences. The theme of characteristics seemed to be linked with the theme 'role achievement': for example, those who were highly experienced in practice, education, leadership and research on appointment were much more likely to feel they had managed to integrate the four domains. These two themes will be discussed in this paper and support systems and NHS influences will be reported elsewhere. Table 2 shows the two themes with the categories into which they were broken down and their dimensions. Because of the specialized nature of the NC posts and small numbers nationally, quotations are not generally attributed directly to specific individuals to protect anonymity.

Characteristics of the postholder

The characteristics of postholders emerged as a major theme, and two categories within this theme were identified: Attributes and Motivation.

<table>
<thead>
<tr>
<th>Table 2 Thematic framework</th>
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<tbody>
<tr>
<td>Theme</td>
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<tr>
<td>Characteristics of the postholder</td>
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<td>Role Achievement</td>
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<td>Concerns</td>
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</table>

Attributes

Background of the individual This seems to have influenced NCs' abilities to cope with the demands of the post (see Fig. 1). Many had been specialist nurses in their field and had worked in higher education. Those who were finding the demands of the post difficult were often lacking in educational, leadership and/or research experience and three of these were MH NCs working in the same trust.

Master's degree The NCs who were meeting the requirements of the post seemed to be those who had already obtained a Master's degree and had undertaken research prior to appointment, for example, one stated: 'I have done research... I did a phenomenology study not so long ago looking at parent's perceptions of living through their child's suffering'.

Those who were coping less well with their roles and were less experienced in leadership, education and research had, with the exception of one individual, not yet obtained a master's degree.

Expert practice All NCs seen had a history of expert practice in their specialist field, including those who were inexperi-
issues in clinical nursing

<table>
<thead>
<tr>
<th>Nurse consultant</th>
<th>Meets all</th>
<th>Meets some</th>
<th>Meets none</th>
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</thead>
<tbody>
<tr>
<td>Nurse consultant 1 (Critical care)</td>
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<td>Nurse consultant 2 (Paediatric ICU)</td>
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<tr>
<td>Nurse consultant 3 (Cardiology)</td>
<td>x</td>
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<tr>
<td>Nurse consultant 4 (Dermatology)</td>
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<td>x</td>
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<tr>
<td>Nurse consultant 5 (Psychological therapies)</td>
<td>x</td>
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<td>Nurse consultant 6 (A&amp;E/MH liaison)</td>
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<td>Nurse consultant 7 (Care of the older person)</td>
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<td>Nurse consultant 8 (Stroke care)</td>
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<td>Nurse consultant 9 (Cancer care)</td>
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<tr>
<td>Nurse consultant 10 (A&amp;E/MH liaison 2)</td>
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Figure 1: Background of the individual – meeting of requirements for clinical experience, qualifications, research, leadership and educational skills.

Empowerment: Empowerment of others was also an important attribute that emerged, and many saw empowerment as one of their main missions in the role: ‘empowerment is where I’m coming from’ was one comment. Another NC had worked with ward managers in developing practice and stated: ‘Once they started to realise “OK, right” ...they were going on with it, so I think there’s empowered nurses... and that again is where the nurse consultant’s role, I think, can come in...’

One interviewee was required to set up a follow-up service for people who had suffered a stroke but said: ‘The intention was that probably I would sit in the clinic somewhere with a team and see patient after patient, but actually I didn’t think that was the most empowering or indeed the best way to do it so I started doing work with practice nurses in surgeries’.

Those who stated that they were having difficulties juggling the demands of the post did not mention empowerment of others as a major component of their role.

Challengers of the status quo: Most NCs demonstrated the ability to challenge the status quo, i.e. existing practice, service organization or culture at a variety of levels. For example, one refused to attend medical rounds, stating: ‘When they start attending nursing rounds, I’ll be interested’.

Determination: This was identified by many as being needed to achieve change and fulfil personal agendas. One talked of how she got nurses to attend her research interest group: ‘hound them, drag them in’. Others were determined to assert their views in situations that might intimidate others, such as at national or trust level, and often with policy-makers, managers or doctors:

I met the director of the British Heart Foundation... it was Professor Sir or Sir Professor somebody and, um, very nice chap but I asked him specifically, ‘So when is the British Heart Foundation going to be sponsoring some nursing research, then?’ And he was very defensive...

Self-confidence: Along with determination went high levels of self-confidence that enabled practitioners to challenge, achieve change and ‘fight their corner’ for what they perceived as important. These who felt they were unable to achieve all aspects of the role perceived that they lacked the self-confidence to change their situation, and a sense of fear was often apparent. Despite having been in post for nine months at the time of interview, one stated: ‘I’ve got a lot of steps to make’ and ‘nurse consultant is still quite foreign language to me’.

Collaboration: The final attribute identified was collaboration in working with others: NCs had to work and liaise with a wide variety of people in many situations, locally, regionally and nationally within their field and at the margins. One, for example, was working strategically in the region, which involved collaboration with many organizations: ‘I cover seven acute trusts and twelve primary care trusts and um have links with higher education, workforce confederations...’

A few NCs were less actively collaborating outside their immediate area of practice; two of these were mental health practitioners who were dealing with the immediate workload...
within the trust and felt they were unable to address little else at that time: 'I've had to withdraw from other activities' was one comment.

**Motivation**

**Personal agendas and desire for change**

Most interviewees were highly motivated individuals who had their personal agenda — areas of interest or philosophies that influenced their practice — and all except three MH consultants demonstrated a strong desire for change in their field of practice, usually linked to these personal agendas. For example, one centred her desire for change on challenging medical domination of nurses and nursing, which she linked to gender issues, describing what she perceived as an 'old boy network' in her trust: 'I said, “Could I have evidence-based nursing?” and they pointed me towards medicine. I came back and said, “That’s very nice, thank you, but what about nursing?”'

Others wished to implement personal agendas by changes in practice or service development:

> We took connected people from service out to look at stroke services in all the different areas and, er, came out with new roles and changes to roles that we needed to support the new service configuration. So I guess that, I’m driving that, that’s sort of my baby as well, if you like.

**Career progression**

Appointment to the post was seen as a way of developing skills and career progression. For example, one NC was undertaking a PhD degree and stated: 'I’m doing it in something I’m passionate about...and it’s gonna be wonderful and I feel I’ve given enough to the discipline and the speciality, and I want...recognition’.

Another wanted to develop her supervisory skills with Master’s level students and progress her career that way: 'I’m supervising a student at the moment, she’s just started herurm, her Master’s course. I would be very keen to continue, er, for my own development'.

**Kudos of the post**

Four people identified the kudos that they and their teams or doctors got from having a NC in post; one stated of her nursing colleagues: 'My feeling is that they are supportive of the role, are pleased to have the kudos of having a nurse consultant, you know, it’s something to be able to tell people about when they’re enquiring about jobs and that sort of thing'.

**Role achievement**

The role achievement theme encompassed two main categories: firstly the Role development by NCs and secondly their Concerns about issues related to role achievement.

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**Role development**

**Integration of the four domains**

Interviewees’ perceptions of how successful they had been in achieving the role differed. NCs who considered that they were undertaking all four domains of the role (DoH 1999b) viewed themselves as experienced, competent practitioners who interwoveved and synthesized these domains: this integration ensured a seamless approach to the role. For example, discussing the work of Manley (1997) one stated:

> I commend...Kim Manley who actually sort of put the whole thing together because your clinical expert practice often reveals areas for practice development which then require research, you then educate people about the research that you’ve done and because you do that, you are leading them...I do think that actually if you’re doing the job properly, then you’re doing it all the time, it just all interweave...

**Non-integration**

The NCs who felt they had not integrated the four domains well were unable to see how all four aspects of the post could be synchronized. These practitioners tended to choose which of the domains they fulfilled over and above clinical commitments: ‘...all four bits won’t be done at once, it’s an impossible juggling act’.

The degree of integration achieved by interviewees is compared in Fig. 2. The domain that caused most difficulty for all NCs, whether they had integrated these or not, was undertaking research themselves. One, who had already obtained external funding for two projects, stated: ‘From my own point of view, primary research is another area that, um, needs developing...within my post’.

Those who considered that they had managed to integrate the domains well felt more able to supervise other nurses who were doing research projects or to apply for funding for projects and then use this to employ research assistants.

All of those interviewed were well aware of the importance of evidence-based practice and critical appraisal skills for all nurses in the NHS, and were working towards achievement of these in their areas, with comments such as: ‘I’ll drip feed them pieces of research when they are there and I’ll make them look at articles and journals’.

**Strategic role**

The NCs who considered that they had achieved integration of all the role domains were active in developing a strategic role by being involved on a strategic level with educational and leadership activities, service development, and research as well as clinical practice, carrying out their role in the wider NHS setting:

> I do have a regional remit...a proportion of my work is...leadership and consultancy work in the whole (name of region)...the prime focus is developing paediatric practice um, but from all the angles of,
Issues in clinical nursing

Table 3 Concerns

<table>
<thead>
<tr>
<th>Nurse consultant 1 (Critical care)</th>
<th>Nurse consultant 2 (Paediatric ICU)</th>
<th>Nurse consultant 3 (Cardiology)</th>
<th>Nurse consultant 4 (Dermatology)</th>
<th>Nurse consultant 5 (Psychological therapies)</th>
<th>Nurse consultant 6 (A&amp;E MH liaison)</th>
<th>Nurse consultant 7 (Care of the older person)</th>
<th>Nurse consultant 8 (Stroke coordination)</th>
<th>Nurse consultant 9 (Cancer care)</th>
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</tbody>
</table>

Figure 2 Integration of four domains.

kind of, education, clinical expertise and skills point of view and the knowledge base and the evidence base, the research...

Strategic working was less obvious in those who had not achieved role integration; they tended to restrict themselves to working in their immediate work environment.

Models of working These varied in NCs who felt they had achieved the role's requirements and some were adopting a medical model, undertaking work previously done by medical staff in order to reflect NHS modernization policies: 'We do light therapy, we do topicals, we do cryotherapy...and they're all nurse-led'.

Others rejected this approach, and emphasized the fact that they were nurse consultants, and were actively working with other nurses to change this medicalized approach: 'They were, I think, marching to medicine's stroke. They still are, but slowly they're beginning to understand that medicine is our customer. We can drive our own models but we're not adept'.

Most had adopted flexible patterns of working but used a variety of working models. However, these were driven more towards achievement of clinical demands in those who were struggling with integration or workload, especially amongst MH consultants, and flexibility in their working patterns was less apparent: 'It sounds like there is huge flexibility but there isn't that much because it is a small team and it all depends on how busy the hospital is'.

Evolution of the role This was recognized by many, with the posts being very new and often loosely interpreted by employers: 'At the moment the role is still in some respects in its infancy and we need to get a lot of the basics and the framework together'.

However, NCs struggling with role achievement were less likely to see the evolutionary nature of the post, whilst some felt powerless to influence the post's direction: 'We're all...constantly dealing with crisis after crisis so it's easy to put off, or, developmental stuff I think'.

Concerns

All NCs voiced some concerns over various aspects of their role or post (see Table 3).

Excessive workload This was a major concern. All interviewees commented on this, and words such as 'hugely', 'massive', 'overwhelming', 'impossible' and phrases such as...
It's lethal if I walk down the corridor' were used to describe how they perceived their jobs. Several commented that the clinical area was their main priority and how, on appointment, their priority was practice or service development at the expense of the other domains: 'You need to attend to [practice] first in order that you can do those other things [research] properly, you know'.

One post in MH liaison had managerial responsibilities, managing a small team of liaison staff, and the NC was responsible to a locality manager in the MH trust rather than sitting outside of general managerial structures; all other posts were directly accountable to Directors of Nursing in the trusts. This caused conflicts: 'It does clash with the role in a sense that it is a conflict actually because consultant nurses, a lot, don't have any managerial responsibility'.

This post involved being on call for the local district general hospital accident and emergency (A & E) department, and any patients with mental health problems in A & E had to be seen and assessed within a specified time frame to meet government targets for waiting times. If a patient came in, all other work had to be dropped: 'Clinical work has to supercede any other'.

The ability to achieve expectations This was also an issue for several reasons: the broad remit of the post was 'hugely wide', the fact that it was a newly created nursing role 'in its infancy' and therefore expectations were not always known explicitly, and personal views of their ability to achieve the demands: 'There are parts of it that are unrealistic and not achievable'. Only two NCs did not see this as a concern.

Inferior or unequal to doctors Most NCs seemed to feel inferior or unequal to doctors. Only three had no concerns in this area, two of whom viewed their posts as being about challenging perceived notions of medical dominance. The third had consultant responsibility for inpatients in a nurse-led unit, had junior medical staff who were answerable to him, and saw himself on a par with the medical consultant: '...cause obviously at the end of the day I'm the consultant responsible for the patient's care, with no other doctor involved'.

Some thought that they were not seen as equal to doctors: 'Well, you're a nurse consultant, not a doctor'. One commented on a lack of control of policy, with consultant medical staff but not consultant nurses seen as being involved in policy decisions on trust committees.

Lack of control over the post's direction The other main area of concern was a lack of control over the post's direction, and all except one NC saw this as a concern. For example, comments were made about differing agenda for the posts: 'It's not up to me, it's a collaborative post'. Being used as medical substitutes was another issue: 'A lot of them seem to be plugging gaps, so where they hadn't had sufficient medical staff in particular areas, then they're seen to have popped up as a nurse consultant role, and I thought, "Mm, I'm not sure if I want a part of that"'.

Similarly, there were difficulties in achieving goals or service development due to lack of authority to control decision-making, or problems with access to decision-makers: 'Trying to get into PCTs, finding the right people to speak to, can be difficult'.

The one NC who did not see this as a problem had overridden any attempts to control her post, and stated: 'I'm not fitting their model'. She refused, for example, to attend doctors' rounds, and said, 'I suppose you go where others fear to tread'.

Discussion

The NCs who were able to carry out their role successfully were the most experienced practitioners who had prior knowledge and experience of all four domains before coming into post, had a master's degree and carried a set of personal characteristics such as expertise, innovative practice, leadership qualities, empowerment skills and determination; they were individuals with high levels of self-confidence and assertiveness. The government-commissioned preliminary national evaluation by Redfern et al. (2003) also found that patterns of role engagement in the four domains were associated with levels of involvement in these domains in previous jobs.

The NCs who were unable to fulfil all aspects of the role were more likely to be achieving only the basic elements, usually clinical commitments. They shared fewer of the characteristics identified above. Those who were involved in more than one domain seemed to practise these in isolation and regarded them as a separate activity to clinical work, rather than inter-weaving and synthesizing all four domains. Redfern et al. (2003) identified five role profiles: high involvement profile with a high involvement across all four domains, dual focus profile with a high level involvement in two domains and medium to low in the other two, a single focus profile with high concentration in one domain and low to medium in the other three, a medium involvement profile reflecting medium involvement in two areas and low engagement in the other two, and finally a low involvement profile with a low level of engagement in at least three domains and low to moderate activity in the other. The NCs in our study fit this framework, with some having a high
involvement profile, some a medium one, and a few having a low profile. However, according to Manley’s (1997) framework for the NC role, practice at this level should be characterized by integration of all four subroles.

It is recommended that NCs should be educated ‘up to or beyond Master’s degree level’ (DoH 1999b, p. 8), but several of our respondents were still in the process of undertaking this, whilst one, who had the most problems adapting to the role, was not registered on a Master’s programme. Similarly, Redfern et al. (2003) found that only 65% of NCs had a Master’s degree or PhD, with a further 25% having only a bachelor’s degree.

Some individuals did not have other professional experience, for example in leadership or educational settings, to equip them for the role, and some seemed to be acting as clinical nurse specialist rather than consultant nurse level. Redfern et al. (2003) also found that differences in role involvement were associated with levels of consultancy-related activities in previous posts.

Certain characteristics emerged as shared by successful NCs. Most were highly motivated individuals who had undergone considerable personal and professional development prior to taking up the post. They were able to challenge existing practice, and acted as change agents, identifying areas for change and achieving change in practice, although where workload was an issue, this activity was restricted. Change was achieved both by practice and service development and by R & D activities, and NCs could be seen to have their own personal agendas and interests, with several having many ideas for development even though they were relatively new in post.

Mental health NCs in both our study and that of Redfern et al. (2003) seemed to be having some difficulties in performing at the appropriate level. Hayes and Harrison (2004, p. 187) also describe ‘particular dissatisfaction and role confusion’ on the part of mental health NCs, and attribute these to ‘fundamental differences in the development, socialization and practice of psychiatric nurses’ (pp. 187-188). However, they do not elaborate on these differences and their possible effects, and their paper is based on a pilot study involving two NCs only, as well as their own reflections as mental health NCs.

The NC role in the UK is a demanding, new, challenging role that could be difficult to achieve without the qualities identified, and the very nature of the role implies that leaders of the field are required to challenge existing practice and open pathways for change. Higgins (2003) comments that NCs need certain attributes to develop a transformational culture and that sound leadership skills, a knowledge base of consultancy, combined with educator and researcher experience are required to deliver this. NCs have to be able to work independently and autonomously, collaborate and communicate well, act as change agents and lead practice.

Conclusion

Those who struggled with integration of the four domains reported that they had limitations in relation to several of these characteristics; whether they can be developed over time is open to debate, and therefore ongoing monitoring and evaluation of the role, role development, and reasons for success or failure of individual posts is needed to ensure appointees are suitable for the nature of the post, and are able to adapt and develop as the role evolves.

The following recommendations emerge from the findings:
1 New appointees to NC posts should ideally possess a Master’s level qualification and have prior experience in all four domains of NC practice;
2 Appointments should be made of dynamic, confident, motivated individuals who are leaders in their field and have evidence of significant change management in NHS contexts;
3 Ongoing evaluation of the role and individual appointments is needed to pinpoint reasons for successful or non-successful role achievement, particularly in the MH consultant group;
4 NCs should not be part of a management tier, but should report directly to the Executive Nurse/Director of Nursing. They should not be expected to be line managers for other staff, as this creates role conflict;
5 There needs to be a national debate and agreed policy on exactly what is the remit of NCs in the NHS: is it to develop nursing and advance nursing expertise, to make a difference to patient care, to create physicians’ assistants, or a mixture of these? If this debate does not take place, policymakers and other health care professionals, rather than nurses, will make these decisions.

Contributions
Study design: VW, CW; data analysis: VW, CW, MP and manuscript preparation: VW, CW, MP.

References
Castledine G (1994) Specialist and advanced nursing practice and the scope of practice. In Expanding the Role of the Nurse: the scope of


Nurse consultants: organizational influences on role achievement

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Aims. This paper reports on organizational influences on nurse consultant post holders. The influence of individual characteristics has been the subject of another paper.

Background. Nurse consultant posts were set up in the United Kingdom from the late 1990s onwards and, therefore, there has been little opportunity to report on evaluations of these innovative initiatives.

Design. A cross-sectional design, using a convenience sample, was adopted.

Methods. Ten nurse consultants working in a variety of settings and specialties participated in in-depth, tape-recorded interviews. The data were analysed using the Framework approach.

Findings. Support systems were important influences on nurse consultants' role achievement levels. These took the form of internal trust networks, nurse consultant forums and links with higher education institutions. Post holders both gave and received support and acted to empower other nurses. Thus, relationships were vital to successful role integration. The culture and structures of the National Health System were also a powerful influence in terms of local and national modernization policies, and participants had to be careful in their choice of strategies to deal with the traditional medically dominated culture.

Conclusions. The new nurse consultant role is challenging and innovative, but a major area of contention is how much post holders are expected to take on work previously done by doctors rather than developing their nursing role. Organizational support and commitment are needed if nurse consultants are to maximize the benefits of this innovation.

Relevance to clinical practice. The findings show that new nursing roles are not always easily accepted in multidisciplinary settings and that holders of such post need to have the appropriate previous knowledge, skills and personal characteristics, as well as the ability to negotiate their way through organizational influences.

Key words: culture, nurse consultants, organizational influences, power, support networks

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Characteristics of the post holder and role have been reported elsewhere (Woodward et al. 2005). The aim of the aspect of the study reported here was to explore the role of NCs from their own perspectives, with particular reference to the research aspects.

Methods

Aim

The aim of the aspect of the study reported here was to explore the role of NCs from their own perspectives, with particular reference to the research aspects.

Background

The UK government established the nurse consultant (NC) role to provide a career structure for specialist clinical nurses with a firm base in clinical practice, which should occupy 50% of their time. Other aspects of the role encompass education and staff development, clinical management and research (DoH 1999a). Because the posts are so new, having been set up in the late 1990s, very little research has been undertaken on their implementation.

A government-funded evaluation of the roles is in progress, and interim findings are available (Guest et al. 2001, Redfern et al. 2003). These report data on a sample of 32 NCs of the total of 158 in post at the time of the study in February 2001. Telephone interviews, questionnaires and role network analyses were carried out and respondents worked in a range of clinical specialties. Participants reported high level of professional reward, but had to struggle with issues of job control, conflict and heavy workloads. As a result, some were not active in the four domains of the role and their clinical contact averaged 44% of their working hours rather than the envisaged 50%.

The data on NC roles reported in the present paper form part of a larger study of nursing research in the National Health Service (NHS). Four themes were identified and two of these – characteristics of the post holder and role achievement – have been reported elsewhere (Woodward et al. 2005). In summary, clear patterns emerged that individual characteristics affected role achievement. NCs who were able to carry out the role successfully were the most experienced practitioners who, before coming into post, had knowledge and experience of all the four required role domains of expert practice function; practice and service development, research and evaluation function; professional leadership and consultancy; and education, training and development (DoH 1999b). They had a master’s degree and a set of personal characteristics such as expertise, a history of innovative practice, leadership qualities, empowerment skills and determination and were individuals with high levels of self-confidence and assertiveness. These attributes were less visible in those who were under-achieving. This paper reports the other two themes – support systems and NHS influences.

Participants

Ten NCs working in four NHS trusts participated in the study. They were a convenience sample of those working in a variety of settings in four NHS trusts, including acute services, mental health (MH), primary health care and cancer services. They were recruited through nurse managers. All NCs except one in the four trusts were interviewed.

Design and methods

For this part of the research a qualitative design was used, and in-depth unstructured interviews were held over an 18-month period. Interviews were conducted by the first author at participants’ places of work, were tape-recorded and fully transcribed, and lasted on average 45 minutes (further details of the methods are given in Woodward et al. 2005).

Ethical considerations

The appropriate NHS Multi-Centre Research Ethics Committee approved the study. Participants received an explanation of the study, were informed that participation was voluntary and could be terminated at any point. The usual assurances about confidentiality and anonymity were given, and consent forms were signed.

Data analysis

The Framework technique of Ritchie and Spencer (1994) was employed to organize and handle the data using Excel spreadsheets. Latent content analysis (Morse & Field 1996, Babble 1998) was undertaken to identify themes within this framework.

Findings

Two of the four major themes arising from the study are reported below. These are support systems and NHS influences, and are presented with the categories and dimensions of which they were comprised. The thematic framework is summarized in Table 1.

Support systems

Networks

Internal trust networks were well established; all NCs seem to have built up strong networks with colleagues, managers and/or research support systems.

Support systems

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<thead>
<tr>
<th>Theme</th>
<th>Category</th>
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<td>Support</td>
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I know who I can access; I know who's out there.

Networks with higher education institutions were mixed. All NCs had a contract with a university (all except one of these were honorary) to contribute to educational activities and/or research in conjunction with the university. NCs who had held previous appointments in higher education or had contacts from work that they had done in collaboration with the university, had a wide range of contacts and support systems.

Most NCs attended a nurse consultant forum. All except one networked within their trusts with other NCs and most attended a national NC forum, or other national committees specific to their specialist area of practice. Attendance at local and regional forums was mixed. The regional NC forum was viewed with mixed feelings, but most considered it to be extremely valuable in enabling NCs from a wide variety of backgrounds to exchange views and working practices:

That group, so supportive and so helpful in testing out our parameters and there was a lot of debate... So that was a very useful group.

Support

Nurse consultants who felt they were integrating the four domains (clinical, research education and management) talked about support provided for others as part of their role:

I established what we call the regional paediatric high dependency working group... on the back of having done a presentation to a multiprofessional group of individuals who have an interest in care,
I think they still don't know what I am really supposed to be doing — where does this person fit in?

Others emphasized multiprofessional working, and felt that the post was not totally theirs but was shaped by others:

My role isn't totally mine; it's a collaborative one with a partnership process.

Working relationships provided some insight into how NCs involved nurses to promote their agendas. When working with nurses, they often challenged the system, and empowered nursing colleagues:

The basis of the role was to give nurses and allied health professionals a voice in cancer services, so one of my roles is to be that voice, to be that champion for cancer services.

Others described working relationships with doctors as mixed. For example, one NC was undertaking work previously done by doctors and stated that 'the medics gave me 100% support.'

Those who described themselves as more challenging and assertive and less prepared to undertake medical roles seemed to have more difficulties in their working relationships with medical staff. One NC who rejected the medical model of care and felt that her trust still adopted 'the old boy network' said that:

Doctors will challenge me in meetings and large groups when I'm doing presentations.

Another illustrated his way of overcoming this:

In the first instance it's working with people who are on your side... Gradually trying to change the culture.

Finally, there was some frustration about internal working relationships with trust managers:

It wasn't mentioned at interview but they rang me and said, 'Oh, by the way, this will mean that you will be included on the on-call duty managers' rota...' so it was very naughty.

The organization was seen as thinking short-term, which increased workload and made future planning and service development difficult:

We're very much a short-term thinking service where we deal with, the crisis and then move on to the next one because there's very little forward planning.

It was also felt that managers under-valued their non-clinical role components:

Nobody's said to me, 'Why haven't you done any research yet?'

NHS influences

Policy

The rationale for the post could be seen in most appointments. Many were influenced by current government policies such as NHS modernization and National Service Frameworks (DoH 1999a, 2000), and others by moves towards more nurse-led care (DoH 2001). One comment was:

The post is quite involved as well with the National Service Framework.

Another was:

It's a waiting list initiative really, so we need to look at the consultant nurse not doctor... through protocol and policy I can do treatment programmes for (patients) without the doctor seeing them.

Several were collaborative posts where the NC worked across more than one trust, thus providing a strategic service, such as a cancer network that provided services to seven acute trusts and 12 Primary Care Trusts. However, only one post holder was jointly employed by an NHS trust and a university: 20% of her salary was paid by the university and she was the only NC to quantify the research element of her post:

Twenty percent what I call academic, which could be research itself, writing papers... it's a joint appointment with (the university) and they pay 20% of my salary so the bare minimum is 20% I give them.

All others had honorary contracts with their local universities but the latter did not contribute towards their salaries.

NHS modernization had affected all NCs, with government policy documents such as Making a Difference (DoH 1999a), Saving Lives: our healthier nation (DoH 1999c), The NHS Plan (DoH 2000), Liberating the Talents (DoH 2002) and the various National Service Frameworks all affecting the creation of posts and influencing the targets that NCs had to achieve. Nurse-led care is expanding and has led to some NCs feeling concerned about becoming 'physician assistants' rather than nurse consultants.

Some trust policies were concerned with local implementation of national policy, but identifying internal funding to do this was an issue affecting service development in some areas. This was more apparent in MH and primary care settings; for example one NC had been concentrating on service reorganization:

I've concentrated my efforts in making sure that we're banging the drum about specialist stroke services... But the service reorganization hasn't happened, and the posts you need within that service don't exist.
Original article

It was stated that legislation was lagging behind practice, for example nurse prescribing:

...really irritating things like patient group directives where I know that there's no legislation to allow me to prescribe... not the sort of things I need.

NHS power-base

Comments on traditions centred on the power-base of the NHS. The majority were about the medical power-base, linking to the previously discussed theme of support systems under the category ‘relationships’, with many NCs commenting on the amount of power wielded by doctors. Two also implied a gender bias:

There’s too many things that are so traditional and so ingrained...
The second thing is a stranglehold politically that medicine has on nursing as a servant.

Some commented on how medical staff were passing on some aspects of medical care but were still reluctant to see NCs as equals. For example, one NC had taken over work previously undertaken by psychiatrists, but:

Referring for in-patient beds is absolutely horrendous... if there's an obstacle that people can put up, then they will... so there's some teething problems with nurse to doctor referrals.

Another was unhappy with the amount of power that medical consultants had at trust board and policymaking level while NCs were unable to inform policy as they were excluded from policymaking committees.

Trade-offs were often used to help achieve goals, including using doctors to help acquire funding for nursing projects:

I put the majority of the money in there. The doctors add a bit... then that money goes into the trust fund.

Alternatively, traditional structures more often used by doctors were accessed to help with research:

I raised I think about £13 000 doing a clinical research trial.

Others used senior medical staff for support when more junior doctors were unhappy with an aspect of their work, working strategically ‘with people who are on your side’ to change culture, or were careful with how they communicated:

A lot of it is about the wrapping, you know, how you parcel something up.

Research

NHS research traditions were commented on: several NCs perceived there was a poor knowledge base to nursing, with nursing research being described as ‘embryonic’ and ‘way behind’, with historically low standards of rigour:

I personally feel nursing research hasn’t always been done properly, hasn’t been particularly well researched.

However, several NCs were hopeful that the current policy of user involvement in the NHS would lead to more research funding to address issues of concern to users and that this would be an appropriate area for nursing research:

I think that the whole service user involvement issue is changing the face of what is regarded as ‘good’ evidence... Now it’s not quantitative research... But it’s taking on board the views of users, which is valid evidence in its own right.

Culture was also identified as an issue. Many NCs stated that nurses were not aware of research and did not see research, even down to accessing evidence, as part of their role:

I don't think we're very good at encouraging individuals to access some of these resources, and I think nurses on the ward definitely don't see it as part of their role.

They felt that nurses saw activities such as going to the library or reading a paper as ‘skiving off’ and even some NCs themselves still felt guilty about taking time out for research or research.

It was seen as part of the role to encourage and nurture cultural change, but this was a difficult, long-term process needing organizational support:

You’re changing the culture all the time so that’s not without it’s disasters on the way... we’re definitely not there yet. And I don’t think it can be left all down to individuals such as myself and other people that are active in research, to take all of that on; there has to be a corporate direction.

However, positive aspects were also highlighted; many NCs used trust facilities such as Research and Development Support Units for advice on design and methodology, and comments were very positive about the help received:

I have been to their courses. I’ve been looking at how to critique papers, how to develop a new service and evaluate... I’ve been to the statistician and they’ve been my main support. I can’t believe all they’ve given me.

Finally, take-up of opportunities for research projects was varied. Four NCs were actively involved in primary research that was not linked to an award; one of these was also doing other research for her PhD. Two were doing research as part of a master’s degree. All NCs except one were able to identify possible research opportunities, but four were not, at the time

of interview, research active. Six facilitated other nurses undertaking research.

Discussion

Support

Where the appointment had worked well, NCs felt generally well supported by the organization and had made great advances in developing education, leadership and research activity. They had been allowed to be flexible in their working patterns, and also in the type of work undertaken, and were seeing their role evolve and develop over time. Most felt that organized support networks were very beneficial to their practice.

Those that were less happy with levels of support wanted more direct managerial support; Redfern et al. (2003) also point out the need for good management support to avoid work overload whilst Wilson-Barnett et al. (2000), in their evaluation of advanced nurse practitioners, highlighted a lack of managerial and professional support. Some NCs carried managerial responsibility for other staff which was not popular and not seen as part of the role. This detachment from a managerial role seems to be generally the case: a second preliminary evaluation report from the team at King's College London who undertook the first national evaluation of the role, was published on the project website (http://www.kcl.ac.uk/nursing/nru/nru_res_rep.html) in February 2003 (although the findings are preliminary and may change as the work progresses). Only 12% of their sample of 368 NCs felt that they were highly involved in management.

The area of support that gained the most praise was the research support system in the NHS. This was set up in the early 1990s following publication of the Conservative government's R & D strategy (DoH 1991). They are funded by the NHS to provide support for all its staff. The service was accessible to, used and valued by NCs and was seen to contribute directly to achievement of the research domain of the role.

Some NCs had been able to set up new posts to directly support them since appointment, such as clinical librarians and research assistants. These posts often enabled the consultant to prioritize his/her time more effectively and implications for other NCs are positive. Guest et al. (2001) found that some NCs had problems with a lack of infrastructure such as offices, computer facilities or secretarial support; this was also the case in their further evaluation report on the project website (http://www.kcl.ac.uk/nursing/nru/nru_res_rep.html): <15% of NCs felt they were provided with adequate resources. Although this was not mentioned as an issue in the present study, and may be a reflection of the fact that NCs were more established in their posts at the time of interview, those consultants that had extra resources in the form of support workers were keen to promote their value. Such posts need to be considered by organizations where they would greatly enhance the output of the NC and/or benefit service users.

Systems of support for NCs were contributory factors in the success or otherwise of role achievement. This mirrors the work of Guest et al. (2001), who found that, in general, NCs were not satisfied with the levels of support they received in areas such as resources and social/managerial support. NCs in that study considered that they had to work hard to gain the support and resources they needed to fulfil their role and their workload increased with the length of time in the job (Redfern et al. 2003), contrary to expectations that it would diminish as NCs became accustomed to the role. NCs in this study also felt that managers placed less importance on the research domain of their role. Managers need to be aware of these factors, understand the nature of the NC role and ensure that NCs are provided with individual support, resources and access to networks to enable them to achieve this role and avoid work overload.

Understanding by colleagues and medical staff

Support from colleagues and medical staff was mixed. Most NCs seemed to feel that their immediate nursing colleagues were supportive. However, nurses at national level in their speciality were generally felt to be less so. Reasons for this can be speculated upon, and could be because of professional jealousy, or a misunderstanding of the nature of the role: it will be interesting to see what the perceptions of NCs are in five-year period when the role is more established. This role ambiguity has also been reported by Redfern et al. (2003) who reported that even some NCs themselves were unclear about their new responsibilities, did not know what was expected of them and did not have a clear idea of what had to be done in the job. This has been reported in other studies evaluating new nursing roles, such as the Exploring New Roles in Practice project (Read et al. 1999) which reported unclear boundaries and ambiguity about the purpose of new roles.

Nurse consultants generally felt that the role was not well understood by medical staff. This had an impact on working relationships: those who were undertaking a role previously undertaken by doctors generally felt that they had good working relationships with doctors. Others were worried by this approach to the NC role, refused to go down this route and were working hard to develop nursing and nurses, rather
than taking on a medical role. These people generally felt less supported by doctors, who were sometimes confrontational. Guest et al. (2001) found that role credibility was a problem with both junior doctors, where the NCs needed to establish the authority of the role and registrars, who objected to the title and had to be won over. Wilson-Barnett et al. (2000) also reported some open conflict between medical and nursing staff over the way advanced nurse practitioner posts were configured.

The nursing contribution

This reopening the debate on what is the nursing contribution to care, specifically what the NC role is, what should it be, and where it should progress to in the future: NC or physician's assistant (PA). This debate about new or advancing nursing roles has been well documented since the late 1960s, with the advent of nurse practitioners and specialist nurses (Fond & Silver 1967, Bowling & Stilwell 1988, Castledine 1991, 1994, Albarran & Flibrock 1998, Paniagua 2001, Cannwell & Daly 2003). Commentators differ in their views, with some embracing the idea of advanced roles taking on medical tasks (e.g. Bowling & Stilwell 1988), and others rejecting this as not in the best interests of nursing or nurses (e.g. Castledine 1991, 1994, 1997). NHS modernization can be seen to have shaped the development of NC posts, and government policy documents such as Making a Difference (DoH 1999a) and Liberating the Talents (DoH 2002) emphasize the way in which nurses can develop their role and take on work previously thought to be the domain of doctors. Advantages to this are seen as being better access for service users, less waiting times, and a way of dealing with a shortage of doctors/reduced doctors working hours.

The NC role could be seen as one way of taking that agenda forward rapidly. However, the original guidance from the DoH (1999b, pp. 6–7) about setting up NC posts stated:

Where posts are structured to include technical or clinical interventions normally undertaken by medical or other staff, these narrow responsibilities should not be the principal element of the post. They should be included only where they are clearly an integral part of, and contribute to, the fundamental core of the nursing, midwifery or health visiting function.

This is rather different to the premise of Making a Difference (DoH 1999a) and Liberating the Talents (DoH 2002), and the work of some NCs interviewed seems to have developed to provide services specifically to relieve doctors' workload. This type of role expansion is seen by some as a missed opportunity for nursing; Radcliffe (2000, p. 1085) argues, for example, that:


Doctors are more than happy to see nurses do tasks that usually take up time and quite frankly bore them.

Nurse consultants who had rejected this approach were convinced they did not want to become PAs, saw empowerment of nurses and nursing as important, challenged the notion of medical dominance and were trying to alter the power base in their area of practice.

Without the 'modernization' introduced by the 'New Labour' government, it is possible that the role would not have been created or expanded as rapidly as has been the case, although nurses' roles generally have been advancing for many years: specialist nurses and advanced nurse practitioners have increased in numbers since the 1980s and 1990s (Wilson-Barnett et al. 2000). Factors contributing to the development of the NC role include the widening scope of practice, a changing skill-mix, expansion of community-based services and the acquisition of extended technical and medical skills (Read et al. 1999, Redfern et al. 2003). However, recent advances in policy, such as Liberating the Talents (DoH 2002), the reduction in working hours for medical staff as a result of the European working time directive (DoH 2003) and renewed focus on health promotion and public health as outlined in Saving Lives – our healthier nation (DoH 1999c) have meant a period of exceptionally rapid change in the NHS which has contributed to the rapid implementation of these roles, based on the concept of Manley (2000, 2001). Some interviewees were impatient for legal change to catch up with changes in practice: this was seen as being behind the times by some, and potentially could give rise to problems with patient safety, legal issues and/or professional accountability as they took on new roles (Dimond 1994, Dowling et al. 1996).

Power in the NHS

The power-base of the NHS was seen by many NCs as a hindrance, with a strong perception that doctors still held the balance of power. Most had learned to use 'trade-offs' to get round, or compensate for it, although some rejected this approach as not in nursing's best interests and were more confrontational. The medical power-base is still seen by many to be dominant in the NHS (Witz 1992, Mulhall 1999), although Mulhall (1999) notes a gradual decline in this. Coombs (2004) found that in the decision-making process, medicine continued to maintain its superiority, the impact of this dominance being that the significance of nursing to inform, implement and manage the decisions was neglected and the nursing contribution under-valued. Whether medical staff actually do hold the balance of power in practice is often
debated. Doctors would argue that successive governmental policies have increased non-medical managerial power, often at the expense of medical power, ever since the Griffiths report (NHS Management Enquiry 1983), commissioned by the previous Conservative government, led to a large increase in non-medical managers in the NHS (Donaldson 1995). This has been termed a ‘management mafia’ (Simpson 1994). However, the fact that these remain the perceptions of at least some NCs has implications for working relationships and care: the question needs to be asked as to whether using trade-offs is acceptable practice for nurses in the 21st century.

This practice of subservient behaviour has been reported since Nightingale recommended nurses to use their ‘feminine subversive tactics in the face of medical and managerial power. Others, however, have found that whilst deference to doctors from the Nightingale era remains influential, nurses are becoming more assertive in their relationships with male medical colleagues (Porter 1992) and Stein, in re-examining the ‘doctor–nurse game’ over 20 years after his first paper (Stein 1967, Stein et al. 1990) found that nurses had changed the way they related to other healthcare professionals, were tired of the handmaiden image, and were more assertive.

Study limitations
The sample size was small, but this was offset by the rich data generated. Although such qualitative studies are not intended to have external validity, the fact that the findings mirror to a great extent those found in the ongoing evaluation by Redfern et al. (2003) and those of other studies of advanced nursing roles adds to their credibility.

Conclusions
The analysis and discussion of the data has shown that the NC role is a complex, demanding and evolving one. Achievement of this role is highly affected by a variety of influences, many of which are outside the control of the individual. This is especially so with support systems and NHS influences which can be seen to be highly influential on role achievement. NCs considered that managers and colleagues often saw the non-clinical domains of their role as secondary, and some did not understand the nature of the NC role. It appears that trusts and individuals have yet to strike the right balance when prioritizing what NCs do.

The main recommendations in relation to organizational aspects of the study are:

- Organizations should develop a greater awareness of the role of the NC and all four domains should be equally supported and respected. They should expect to see results in all four domains, not just in the clinical aspects. Protected time for NCs to practise in all domains, with provision of associated resources, should be assured; managers should provide good levels of support to individuals.
- Organizations should consider the development and funding of supporting posts, such as clinical librarians and research assistants.
- There needs to be a national debate and agreed policy by nurses on exactly what is the remit of NCs in the NHS: is it to develop nursing and advance nursing expertise, is it to create physicians’ assistants, or a mixture of both? If this debate does not take place, policy makers and other healthcare professionals, rather than nurses, will make these decisions.
- Policy makers locally, regionally and nationally in the NHS and in government should look to NCs to inform and advise on their areas of practice and include them as leaders in their field, in much the same way that medical consultants advise both on NHS and governmental policy.

In conclusion, the development of this new role is an exciting, challenging and innovative addition to the nursing profession. There are many issues to be faced by NCs, and one of the main areas of contention is how much they are expected to take on doctors’ duties at the expense of developing nursing. However, the formal recognition of these nurses as autonomous, expert practitioners who lead change, challenge and develop existing nursing practice and add to the nursing knowledge base is a positive move that, supported well, developed carefully and evaluated regularly, should benefit clients, the NHS and nursing as a profession.

Contributions
Study design: VAW, CW; data analysis: VAW; manuscript preparation: VAW, CW, MP.

References
Original article


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