Nurses' participation in audit: a regional study

Francine M Cheater, Michael Keane

Abstract

Objectives—To find out to what extent nurses were perceived to be participating in audit, to identify factors thought to impede their involvement, and to assess progress towards multidisciplinary audit. **Research design**—Qualitative.

Methods—Focus groups and interviews.

Participants—Chairs of audit groups and audit support staff in hospital, community and primary health care and audit leads in health authorities in the North West Region.

Results—In total 99 audit leads/support staff in the region participated representing 89% of the primary health care audit groups, 80% of acute hospitals, 73% of community health services, and 59% of purchasers. Many audit groups remain medically dominated despite recent changes to their structure and organisation. The quality of interprofessional relations, the leadership style of the audit chair, and nurses' level of seniority, audit knowledge, and experience influenced whether groups reflected a multidisciplinary, rather than a doctor centred approach. Nurses were perceived to be enthusiastic supporters of audit, although their active participation in the process was considered substantially less than for doctors in acute and community health services. Practice nurses were increasingly being seen as the local audit enthusiasts in primary health care. Reported obstacles to nurses' participation in audit included hierarchical nurse and doctor relationships, lack of commitment from senior doctors and managers, poor organisational links between departments of quality and audit, work load pressures and lack of protected time, availability of practical support, and lack of knowledge and skills. Progress towards multidisciplinary audit was highly variable. The unidisciplinary approach to audit was still common, particularly in acute services. Multidisciplinary audit was more successfully established in areas already predisposed towards teamworking or where nurses had high involvement in decision making. Audit support staff were viewed as having a key role in helping teams to adopt a collaborative approach to audit.

Conclusion—Although nurses were undertaking audit, and some were leading developments in their settings, a range of structural and organisational, interprofessional and intraprofessional factors was still impeding progress. If the ultimate goal of audit is to improve patient

care, the obstacles that make it difficult for nurses to contribute actively to the process must be acknowledged and considered.

(*Quality in Health Care* 1998;7:27-36)

Keywords: nurses; audit; multidisciplinary audit

Introduction

The quality of care depends to a large extent on the contribution of nurses,¹ who make up the largest proportion of the clinical workforce in the National Health Service (NHS) in the United Kingdom. More than ever, current demands for practice to be evidence-based,² and new or expanding nursing roles, reinforce the need for systematic assessment of nursing practice, through methods such as audit. As a consequence of NHS reforms in 1989, audit, defined as the systematic critical analysis of care, initially focused on the work of doctors (medical audit) but this policy was rapidly revised to include nurses and other professional groups (nursing and therapy audit).³ Recognising that effective teamworking was the key to improving quality of care, subsequent policy encouraged a multidisciplinary approach to audit⁴ although the need for some unidisciplinary audit was recognised.⁵ At the same time, healthcare providers were being encouraged to integrate audit within a wider quality management programme within their organisations, linking with activities such as continuing professional development, risk management, clinical guidelines, the *Patients' Charter*, and patients' and carers' views.^{6,7} Also, although audit was initially viewed as a professionally led activity, provider and purchaser managers expected to have a greater role in the process.⁸

Alongside these developments, the drive towards evidence-based health care (clinical effectiveness) gathered momentum, aiming to accelerate and improve the application of evidence from sound research to clinical practice.⁹ Audit was viewed as a key component of clinical effectiveness, a tool used by practitioners and purchasers to determine the extent to which effective methods of care were being implemented.² Supported by an organisational infrastructure (box 1), audit is now an expected part of the work of all health professionals.

Evaluation of the implementation of audit in hospital and community healthcare services¹⁰⁻¹² and primary health care^{13,14} indicated that medical audit had become fairly well established. An evaluation of the development of nursing and therapy audit concluded that it had been moderately successful, although many nurses had little or no involvement in audit.¹⁵ Research on participation of practice

Eli Lilly National Clinical Audit Centre, Department of General Practice and Primary Health Care, University of Leicester, UK

Francine M Cheater, senior lecturer in clinical audit (nursing)
Michael Keane, research associate

Correspondence to:
Francine M Cheater, Eli Lilly National Clinical Audit Centre, Department of General Practice and Primary Health Care, University of Leicester LE5 4PW, UK. Tel: 0044 116 258 4873; Fax: 0044 116 258 4982; Email: fc8@le.ac.uk

Accepted for publication
15 January 1998

<p>Provider or purchaser Acute hospitals or community healthcare services</p> <p>General practices</p> <p>Health authorities (purchasers of health services from healthcare providers to meet the needs of the local population)</p>	<p>Audit structure Audit or quality group or committee with multidisciplinary representation, responsible for the strategic and operational management of audit within their organisation. The group is usually chaired by a senior member of clinical staff (doctor, nurse, or other professional). Most healthcare providers employ one or more audit support staff to provide education, information, and technical expertise to healthcare professionals. A primary care audit group or medical audit advisory group within each health authority with multidisciplinary representation, responsible for advising, encouraging, and supporting general practitioners and other members of the primary healthcare team to undertake audit. The group is usually chaired by a general practitioner. One or more audit facilitators are employed through the primary care audit group to provide education, information, and technical expertise to general practitioners and other members of the primary healthcare team. Audit leader: one or more people (eg public health consultant, medical advisor) in a health authority with responsibility for audit in acute or community providers and primary health care.</p>
---	--

Box 1 Audit structures in acute hospital, community services, or primary health care and purchaser levels.

nurses in audit has been limited although Chambers *et al* suggested that most audit in general practice may be doctor led.¹³

Some studies have suggested that multidisciplinary audit has been slow to develop and that the unidisciplinary approach remains the norm.^{11 12 16} By contrast, evaluation of the nursing and therapy audit programme¹⁵ reported that most audit was multidisciplinary in nature, although the disciplines involved, and to what extent, were unclear. A national survey of audit activity across the primary-secondary care interface¹⁶ found that it was taking place on a wide scale although most audits stopped short of implementing change. Most of these audits were initiated by doctors who tended to dominate audit groups. Morrell *et al*¹⁷ have reviewed the use of the Royal College of Nursing dynamic standard setting system. Although it was used as a model for collaborative audit in some study sites, misunderstandings and “tribal” boundaries hindered the process.

It is important to understand the factors that impede nurses’ involvement in unidisciplinary and multidisciplinary audit, if they are to take an active role in assessing the quality of their care. Although several studies have examined the obstacles to effective medical audit^{10 11 13 18} these issues have received comparatively little attention in nursing and no study has been undertaken in all three health settings of primary, community, and acute care.

This paper reports part of the findings from a study commissioned by the former North West Regional Health Authority to assist the devel-

opment of audit in the region.¹⁹ The overall aim was to provide an overview of the development and perceived impact of audit, from the perspectives of purchasers and providers. In this paper we concentrate specifically on the information obtained about nurses’ participation in audit. The research objectives relating to this aspect of the study were to find out to what extent nurses were perceived to be participating in audit and identify factors thought to impede their involvement, and to assess progress towards multidisciplinary audit.

Method

FOCUS GROUPS AND INTERVIEWS

The research design was a qualitative study with focus groups as the main method of data collection. This approach enables the collection of detailed information about people’s views, experiences, or attitudes through a guided discussion.²⁰ Questions considered the following areas:

- Composition of the audit group
- Strategy or plan for audit
- Contracts
- Audit funding
- Monitoring and evaluation of audit
- Level of participation of doctors, nurses, therapists, managers, and patients
- Progress towards multidisciplinary audit
- Interface audit
- Integration with quality and other related areas
- Impact of audit
- Future directions.

Table 1 Response rates from audit groups and health authorities

Source	Total identified (n)	Represented (n (%))
Primary care audit groups	19	17 (89.5)
Community health service provider audit groups	22*	16 (72.7)
Acute hospital audit groups	40	32 (80.0)
Health authorities	17	10 (58.8)

*14 Community health service providers had joint audit groups with local acute hospitals.

The prepiloted questions used in the interview guide were open ended to stimulate discussion.

Box 2 shows examples of questions from the interview guide, specific to the content of this paper. Interview guides were modified to take account of whether participants were from purchaser or provider organisations. When attendance at a focus group was not possible, with the same interview guide, participants were offered either a face to face or telephone interview. Data were collected between July and October 1995.

SELECTION OF PARTICIPANTS

Due to constraints on time, clinical staff were not directly targeted. Instead, all those responsible for managing and supporting audit at an organisational level, in the 17 health authorities of the North West Region, primary care audit groups (formerly medical audit advisory groups) and acute and community providers were invited to participate. Participants comprised:

- Chairpersons of audit groups in primary, community, and hospital health care
- Audit support staff in primary, community, and hospital health care
- Audit leaders in health authorities.

Although nurses were included in the study, it was recognised that they were likely to be underrepresented. However, participants were selected because their roles enabled them to provide an overview of development of audit within their particular areas of responsibility, or because of their work supporting professionals to undertake audit. As such, it was anticipated that participants would be ideally placed to offer a range of views on the issues under discussion, including their perceptions about nurses' involvement in audit. Participants were identified either by contacting individual sites or through a primary care database developed and maintained by the Lilly Audit Centre.

It was anticipated that some audit support staff might have been inhibited about speaking freely on some issues in the presence of audit chairpersons, so separate focus groups were arranged for each. Except for combined acute

Table 2 Role of audit leaders (n=47)

Source	Role	n
Primary care audit group	General practitioner	10
Acute hospitals or community services	Medical director	4
	Consultant	15
	Director of nursing	3
	General practitioner	1
Health authority	Director or consultant in public health	8
	Medical director or advisor	3
	Quality manager	2
	Contracts manager	1

Composition of audit group

Has the composition of your audit group changed (in the past few years)?

How?

Prompt (if necessary): representation from nurses, therapists, managers, non-clinical managers, purchasers, other sectors, patients.

Have these changes influenced how your audit group works?

How? Can you give examples?

Integration of audit with other quality issues

How is audit linked with other quality improvement initiatives?

Probe (if necessary): Patients' Charter, complaints or risk management, total quality management or continuing quality improvement, research and development, continuing professional development

Participation in audit

Are most doctors and other staff now doing some audit or is it still something being done mainly by the enthusiastic few?

Establish extent of involvement: of doctors, nurses, therapists, and managers.

Based on your experience, what are the factors that seem to facilitate participation in audit? What are the barriers?

Multidisciplinary audit

How far has multidisciplinary audit developed in your area or locality?

Can you give examples?

Probe if necessary: in your experience what seems to be associated with successful team audit? What are the barriers?

Box 2 Examples of questions from interview guide.

and community providers, separate focus groups for hospital and community health services were also arranged. Focus group discussions and individual interviews were audiotaped. One researcher led the group (FMC or MK) while another observed and recorded the interview. At the end of each focus group meeting the researchers discussed and compared accounts of the discussion. All individual interviews were undertaken by MK.

ANALYSIS

Data from audiotapes were transcribed verbatim and analysed by developing a coding framework based on issues emerging from the data. Ethnograph (v3.0)²¹ was used to assist with data handling. Throughout data collection and analysis the researchers conferred regularly, and checked original transcripts for inconsistencies and alternatives, to ensure that the processes of analysis and interpretation were consistent.

Results

RESPONSE

Fourteen focus groups (comprising between three and 11 participants each) and 15 interviews were held. In total 47 audit leaders

Influential	Limited or no influence
<ul style="list-style-type: none"> ● Personality and leadership style of audit chairperson—collegial interprofessional relationships ● Audit perceived as a team activity ● Senior nurses with knowledge and experience of audit ● Audit groups merged or reconstituted ● Audit groups well established 	<ul style="list-style-type: none"> ● Personality and leadership style of audit chairperson—hierarchical interprofessional relationships ● Audit perceived as a doctor led activity ● Nurses with little or no authority, lack of knowledge and experience of audit ● Medical audit group extended membership ● Audit groups in early stages of development or reorganisation

Box 3 Factors related to nurses' influence with audit groups.

(of which 87% were from medical disciplines) and 52 audit support staff (of which four were from a nursing discipline) participated. Table 1 shows the response rates by audit group in each setting (primary care, acute, community) and by health authority. Respondents leading audit at provider or health authority level (table 2) had an average of 2.1 years experience in this role (four had ≤ 6 months experience). Audit support staff had been in their present post for an average of 2.4 years (five had ≤ 6 months experience).

Several similar and contrasting issues emerged within and between different groups. The findings are structured under three broad categories, corresponding to the questions in the interview guide (box 2). Firstly, nurses' involvement in audit at an organisational level covers issues about the composition of the audit group, factors associated with achieving multidisciplinary representation, and the influence nurses were perceived to have on the work of audit groups. Secondly, perceptions of nurses' level of participation in audit and the factors thought to impede the process are presented. Finally, the third category deals with the extent to which audit had become multidisciplinary and the identification of factors perceived to be hindering or facilitating its development. Responses are illustrated by examples quoted directly from transcripts.

NURSES' INVOLVEMENT AT AN ORGANISATIONAL LEVEL

Composition of the audit group

Although most audit groups were multidisciplinary to some degree, representation from the medical staff usually outweighed that of other disciplines.

"If you look at trust A they have an audit committee which consists of 22 people of which 18 are doctors, which doesn't seem to be very multidisciplinary to me." (Director of public health, health authority.)

Two acute hospitals retained medical audit committees and had parallel nursing and therapy audit groups. The need for audit to be medically led was a view expressed by a few primary care audit groups. In these instances, multidisciplinary representation has been resisted because of anticipated difficulties resulting from the employer-employee relationship between general practitioner and practice staff.

"...there were problems with how they (general practitioners) felt the practice nurse or the practice manager would relate to the rest of the group and the fact that they would be employ-

ees of the general practitioners who were sort of directing the audit." (Audit facilitator, primary care audit group.)

Doctors' resistance to the inclusion of nurses and representatives from other disciplines in some hospitals was due to their concerns about confidentiality. Respondents suggested that these initial reservations were slowly disappearing as audit groups matured. In some acute and community providers, audit groups had established balanced representation from a range of disciplines. This was achieved most successfully where former medical audit groups had either disbanded and new clinical audit or quality groups had formed in their place, or where separate medical, nursing, and therapy audit groups had merged. Medical audit groups which had extended their original membership to include representatives from other disciplines tended to remain dominated by doctors.

Influence of nurses

Of a total of 65 audit groups represented in the study, three were chaired by senior nurses (two acute hospitals, one community provider) and the rest by consultants or general practitioners. Medical leadership was regarded as a key factor in determining whether audit had credibility with doctors. Some audit support staff thought that without medical leadership few doctors would take part in audit.

"...its been said that if the director of nursing and quality took over audit—then it would stop. The doctors wouldn't take part." (Acute hospital, clinical audit coordinator.)

Views about how much nurses and other non-medical disciplines contributed to the work of audit groups varied considerably.

"I suppose it depends upon the person. They (practice nurses) keep our feet on the ground I feel. And they often contribute far more than the doctors do." (Primary care audit group chairperson-general practitioner.)

"We've got nurses, therapists, pharmacists ...and I'm actually disappointed by the amount of input they have put into the committee although they are sitting there as equal members of the committee they tend to keep very quiet..." (Acute hospital audit group chairperson, consultant.)

This contrast in experiences was common among respondents from hospital, community, and primary care audit groups. The influence of nurses on the work of the audit groups seemed to be related to several factors (box 3). How nurses were viewed within the group

- Hierarchical nurse-doctor relationships
- Poor organisational links, or conflicts between departments of quality and departments of audit in acute and community providers
- Lack of commitment from senior nurses or managers in supporting nursing audit
- Work load pressures and lack of protected time
- Availability or lack of uptake of practical support
- Lack of knowledge and skills to undertake effective audit
- Competing priorities for continuing education, audit training low priority

Box 4 Reported obstacles to nurses' participation in audit.

depended on existing interprofessional relations and the personality or leadership style of the chairperson. When audit was considered to be a predominantly doctor led activity, professional relationships between doctors and nurses tended to be hierarchical and the impact of nurses on the work of the audit group was more likely to be viewed as limited. When interprofessional relations were more collegial, audit was more readily viewed as a team activity, and the influence nurses exerted within the group was perceived to be greater. In these audit groups, the range of perspectives and contributions which nurses and other disciplines could offer were explicitly acknowledged and valued.

"...and their impact (nurses and other practice staff) has come through the audit strategy because they've said 'what about this? What are we doing about that?' and they've dragged it in a slightly different direction, widened the strategy to incorporate what they see as important for the people they represent." (Primary care audit group facilitator.)

Representatives from nursing were sometimes the most enthusiastic champions of audit within the group.

"Since a clinical nurse specialist has come on board she is very enthusiastic and is getting the other nurses motivated. So we (audit group) are getting bombarded by audit projects." (community provider chairperson, medical director.)

Nurses' level of seniority, as well as their knowledge and experience of audit, were also related to the influence they were perceived to have within the group.

"...I think its (lack of influence on audit group) partly because nurses and other professionals don't really know enough about what audit has to offer..." (Acute hospital audit chairperson, consultant.)

NURSES' PARTICIPATION IN AUDIT

Level of participation

Nurses were viewed as having generally positive attitudes towards audit, although this did not necessarily translate into action. Box 4 shows factors which seemed to discourage nurses from participating in audit. In acute and

community providers, nurses' participation in audit was considered to be substantially less than that of doctors. However, many respondents thought the true level of nursing audit to be higher than was officially recorded through formal purchaser and provider monitoring mechanisms. Individual nurses often initiated audits without notifying, or seeking the assistance of, audit support staff. It was also recognised that some audit was initiated through quality departments and was managed by senior nurses. Communication between audit staff and nurses in quality departments was often limited or non-existent. Consequently, audit which nurses were undertaking did not always come to the attention of audit support staff or audit groups. Although developments to integrate audit into wider quality management programmes were either already established, or underway in most hospitals and community providers, some audit staff and nurses in quality departments felt particularly threatened by these changes.

"We have a strong director of nursing and quality with a strong quality department, then we have a strong audit department. Its like tribalism, the two won't come together ..." (Acute hospital, clinical audit coordinator.)

An absence of any clear delineation between their respective roles and responsibilities exacerbated the situation. Doctors and nurses often adopted different approaches to audit, each having little understanding of the other's perspectives, and this also led to difficulties.

"We are trying to bring nurses in, it is proving very difficult because they tend to see quality issues as separate from audit issues..." (Acute hospital audit group chairperson, consultant.)

Although nurses were considered to be doing less audit overall, it was recognised that sometimes nurses, rather than doctors, were taking a lead role. This tended to occur in settings where the medical staff had shown little interest in becoming involved in audit themselves.

There was general consensus among primary care audit group respondents that as well as general practitioners, other members of the team were being actively targeted to advance audit within practices. Often, it was the practice staff, in particular practice nurses, rather than the general practitioners, who were viewed as the local enthusiasts.

"...time is better spent to have the facilitator go in and identify who an audit motivator is within the practice which is very often the practice nurse." (Primary care audit group, chair.)

In some practices, nurses and other staff were regularly initiating and carrying out audit whereas the general practitioners in the same practices engaged in little or none. A few practice nurses were reported to be undertaking audit in secret because the general practitioners in the practice did not approve.

"We have a practice nurse...she has to keep it quiet but she has to do it, she takes everything home and can do it at home. But she's only looked at things she knows she herself can

change, can do something, so it has not been a wasted exercise...she's very enthusiastic." (Primary care audit group facilitator.)

Similarly, a lack of commitment in supporting nursing and therapy audit from senior doctors and managers was a common theme to emerge from respondents in acute hospitals.

"One of the reasons nurses and therapists don't do very much (audit) is that they say that unless their clinical directors are committed to audit, they don't get much encouragement. They all say if their consultants are not interested it's very difficult for them to set up an audit project off their own bat." (Acute hospital audit group, consultant.)

In primary health care, participation in audit among the attached nurses (district nurses and health visitors) was less evident than for practice nurses. Lack of support from community nurse managers and difficulties in releasing staff due to nurses' work loads, were the reasons most often given for their limited involvement.

Resources

The availability of resources was identified as a key factor influencing nurses' participation. The need for time and adequate practical support to undertake audit were identified by respondents from both providers and health authorities.

"...in moving from medical audit to clinical (audit) people still haven't really faced up to the real cost of all disciplines, for instance, having time out. Doctors have in their job plans now, time allocated. But a lot of staff don't." (Health authority, consultant in public health.)

Whether resources were forthcoming was thought to depend mainly on the level of commitment by senior management at both provider and purchaser level.

"It does very much depend upon the trust board and purchasers actually saying 'how important is this quality angle to us', and if they decide to find ways that they actually free up paramedical and nursing staff to take part in this process in a much more positive way than they are now..." (Acute hospital clinical audit group chairperson, consultant.)

Audit was not a priority in some acute and community providers because of nurses' increasing work loads. Practical support for audit was sometimes limited, although audit support staff thought that in many cases nurses were not taking advantage of the help that was readily available. Seconding nurses to audit or quality departments for training, and to carry out specific projects, was a successful approach used in some hospitals. In primary care, two practice nurse audit groups, funded through the former family health services authorities, had provided small amounts of financial support for nursing audit. However, respondents thought that most nurses who were undertaking audit were doing so either during clinical time or in their own time.

- Hierarchical doctor-nurse relations
- Poor teamworking
- Practical difficulties in arranging multidisciplinary group meetings
- Interprofessional differences in approaches to audit
- Nursing audit perceived as less credible than medical audit
- Lack of commitment from senior doctors or managers in supporting multidisciplinary audit
- Lack of or insufficient influence of purchasers
- Nurses with little professional autonomy
- Audit in early stages of development in the team or organisation
- Widely differing levels of audit knowledge and experience within the team
- Lack of or limited support for teams (facilitation by audit support staff)

Box 5 Reported obstacles to multidisciplinary audit.

Knowledge and skills

Inadequate knowledge and skills to undertake effective audit were considered to be major obstacles for many nurses, preventing them from taking an active and equal role in audit. This need for training often placed considerable demands on audit support staff, given the size of the nursing profession, staff turnover, and for community providers, the wide geographical distribution of staff. Other requirements for education and training were perceived as competing with, and often had priority over, the need for audit training.

"I think there are so many demands on staff to attend training...audit, and quality research are sort of bottom of the list." (Community provider, clinical audit coordinator.)

PARTICIPATION IN MULTIDISCIPLINARY AUDIT

Progress

Audit was still viewed as predominantly unidisciplinary in nature, particularly in acute hospitals. Respondents from health authorities expressed this view most strongly.

"I found that all our acute trusts still do medical audit, I am constantly going on about them involving other professions." (Health authority, public health consultant.)

There was a range of views, however, suggesting that progress both within and between different organisations was highly variable.

"It's the norm now rather than the exception." (Acute hospital audit group chair, consultant.)

"It's undoubtedly a problem, we're still stuck in the medical model..." (Acute hospital audit group chairperson, consultant.)

Some community providers had adopted a multidisciplinary approach from the outset whereas others were still in a process of transition from medical to clinical audit. In comparison with acute and community health services, multidisciplinary audit seemed further advanced in primary care. However, audit

chairpersons presented a more favourable view than audit facilitators or representatives from health authorities. Some facilitators thought that there were still many practices in which teamwork remained a problem and consequently, multidisciplinary audit was taking longer to establish. Box 5 shows the factors that emerged as presenting obstacles to multidisciplinary audit.

Practical difficulties

Time was once again highlighted as a constraint in setting up multidisciplinary audit. Arranging meetings when all representative staff could meet together caused logistical difficulties for many audit support staff, particularly in acute hospitals. In some instances audits had been discontinued as a result. Building up support for collaborative audit, by liaising with key people in unidisciplinary groups, initially was a successful strategy used by some audit support staff to resolve the problem of convening team meetings.

Relations between professions

In all settings, the influence of existing relations between the professions, particularly between doctors and other disciplines, was again highlighted:

"If general practitioners are secure in themselves and don't need to be autocratic then you get some super audits going quickly...they don't have to prove they are boss. They are just part of a team." (Primary care audit group, facilitator.)

"...the caring professions within the trust itself...their voice at present isn't heard, its not listened to at all. If you bring in that voice it does threaten the hierarchy. Those most under threat are medical staff...who previously have enjoyed God-like status, the consultant who tells everyone what to do. That attitude is going to have to be changed somehow." (Acute hospital audit group chair, consultant.)

Differing professional perspectives and contributions were acknowledged and valued in some teams but they led to difficulties in establishing multidisciplinary audit in others.

"They (nurses and disciplines allied to medicine) think in different ways to doctors...complete difference in the way they look at things." (Acute and community providers, audit group chairperson, consultant.)

Two audit chairpersons (consultants) from acute hospitals, and a few audit staff, thought that audit undertaken by nurses was less credible than medical audit because it dealt with topics perceived to be of little interest to medical staff. These perceptions created additional difficulties in getting multidisciplinary audit established. Respondents recognised that it was often necessary for health professionals to change firmly established attitudes and working methods before they could work together effectively, and this would take time. However, they also thought that in many settings a culture of collaborative working was slowly emerging.

Multidisciplinary audit seemed to have become more successfully established in areas

where working practices were already predisposed towards teamworking or where nurses had a high degree of involvement in decision making—for example, clinical nurse specialists, nurse practitioners.

"In certain directorates it's (multiprofessional audit) well established, like mental health, obstetrics, gynaecology and care of the elderly and always has been." (Health authority, public health consultant.)

Alternatively, most respondents could identify areas—for example, surgery—in which it was proving particularly difficult to encourage medical staff to participate in multidisciplinary audit.

"There seems to be a fearful air of paranoia about them (doctors in a surgical specialty) for some reason. They very much like to keep everything behind closed doors nor write anything down." (Acute hospital, audit group chairperson, consultant.)

Commitment from senior staff

Support from senior doctors was perceived to be essential for multidisciplinary audit to work. The influence senior doctors had on bringing about change was well recognised among audit support staff.

"You work with the midwives or whoever, and the senior registrar on a project...and they are really interested. But then the people who are actually bringing about change are the consultants and they don't want to know. This can be quite frustrating." (Acute hospital, audit coordinator.)

The most successful audits were often those in which nurses or audit support staff had actively targeted doctors known to be supportive of them and influential with their medical colleagues. Respondents from health authorities were unanimous in declaring their support for multidisciplinary audit, actively encouraging its development in negotiations with their providers.

"My priority is to get audit accepted as a day to day activity that nobody regards as special...and to make it truly multidisciplinary." (Health authority, medical advisor.)

Some audit support staff thought that purchasers exerted too little influence on their providers, preferring instead to support medical rather than multidisciplinary audit. Views expressed on how to support multidisciplinary audit differed and depended on how established audit was within the organisation. Some audit groups had explicit well developed policies on managing a multidisciplinary approach to audit which were viewed as being fairly successful in meeting their objectives.

"Its very much a team approach to audit. We've worked very hard at it and its needed a lot of promotion—we're a support team for audit. We're not supporting separate audits so as a department, its a team approach across the board. We're not supporting the nurses doing their audits, the physio doing theirs, and the occupational therapists doing theirs, they're all meeting together as a team..." (Acute hospital, clinical audit coordinator.)

In other hospitals, the lead clinician in each directorate (usually a doctor) was responsible for promoting multidisciplinary audit, the success of which depended on the enthusiasm and commitment of the person concerned. In areas where audit was less well developed, efforts were being directed towards supporting unidisciplinary audit first before embarking on collaborative audit projects.

The involvement of the audit support staff was viewed as an important factor in getting multidisciplinary audit established.

“(multidisciplinary audit means)...going out there and pushing it, promoting it and selling it, and setting up mechanisms that everybody knows about.” (Acute hospital, audit coordinator.)

The need for facilitation and ongoing education of teams (teambuilding) beginning to undertake multidisciplinary audit was stressed by most audit support staff. Most viewed this form of support as an essential but time consuming part of their job.

Discussion

We set out to find out to what extent nurses were perceived to be participating in audit, identify factors thought to impede their involvement, and to assess progress towards multidisciplinary audit. Our findings clearly indicated that nurses' participation in audit was influenced by several factors that could be structural, organisational, intraprofessional, and interprofessional, many of which were interrelated. Any interpretation of these findings needs to take into account the limitations of the study.

LIMITATIONS OF THE STUDY

Targeting people responsible for developing and supporting clinical audit may have predisposed the responses towards social desirability. However, participants expressed a range of negative as well as positive views, suggesting that they were not unduly influenced by a need to express only those views thought to be acceptable to the researchers.

As pointed out earlier, although some audit support staff and audit leaders were nurses, the views of practising nurses were not elicited directly. The views expressed were from a range of professionals about nurses' participation in audit, not nurses' own perceptions of their involvement in the process. The perspectives of nurses (and other practitioners), therefore, may not be fully represented in this study.

POSITIVE ATTITUDES TOWARDS AUDIT

Nurses were considered by many of those involved in managing and supporting the audit process to have positive attitudes towards audit, and in some care settings, nurses rather than doctors were perceived to be the local enthusiasts. Negative attitudes towards audit among doctors have been reported,^{22 23} and may impede their participation in the process. Nevertheless, in our study, overall audit activity was perceived to be higher among doctors than nurses.

WORKING TOGETHER AND EFFECTIVE LEADERSHIP
Audit groups are influential in developing and implementing audit policy locally and should have a balanced representation which ensures that the views of all relevant disciplines are reflected. In this study, as in others,^{11 24} many audit groups were still largely medical, rather than multidisciplinary in composition.

In comparison with nurses, doctors have more power and influence within their organisations, which may have been reflected in the medical dominance of leadership positions in audit groups and in local audit programmes. Some audit support staff were concerned that without medical leadership, doctors would not cooperate in undertaking audit. Our findings indicated that in the few instances when nurses were leading audit groups, or local audit programmes, lack of cooperation from doctors had not emerged as a particular issue. These nurses had credibility and were respected by their colleagues. It has been suggested that rotating leadership positions across disciplines could be a way of avoiding the dominance of any one professional group.¹¹ The leadership style of the audit chairperson (autocratic versus consultative), however, is an important factor to consider. Effective audit depends on the willingness and ability of those who lead audit groups to provide the conditions in which collaborative working is possible. Also, whether audit groups reflected a multidisciplinary or a doctor centred approach depended on such additional factors as the quality of existing interprofessional relations, the seniority of nurses, and their level of audit knowledge and experience. We suggest that audit groups should consider not only the balance of disciplines in their membership but also take into account the mix of skills and personal characteristics which can strongly influence how a group will operate.

CONSTRAINTS IN PRIMARY HEALTH CARE

Weaknesses arising from different management structures, lines of accountability, and contractual arrangements for many nurses working in primary care are widely acknowledged²⁵ preventing some, particularly the attached staff, from taking an active role in practice based audit. Local funding arrangements need to be established for joint audits between community nursing services and general practitioner practices and a fair system for the allocation of audit resources needs to be established for practice nurses. More flexible contractual and employment arrangements advocated in a recent government white paper on the future of primary health care²⁶ may provide opportunities to resolve some of these longstanding structural issues. Such changes will be difficult to implement, however, without first considering the attitudinal barriers that still exist in some primary healthcare teams.

However, many practice nurses were perceived to be actively participating in audit, and in some cases, were leading developments in their areas, which is encouraging. Although this study did not set out to measure the level of audit activity, these findings contrast with the

conclusions of an earlier study¹³ that suggested that practice nurses had minimal involvement in audit. Increasing requirements for practice nurses to show continuing professional development, enhanced confidence, and ability to undertake audit, and rising pressures on general practitioners' time may be possible explanations for our findings.

LINKS BETWEEN QUALITY PROGRAMMES AND AUDIT

It has been suggested that the profile of nursing audit in many hospitals has been reduced due to the artificial division between nurse led quality programmes and medical audit.²⁷ Our findings indicated that a proportion of audit was being undertaken by nurses in comparative isolation within their organisations, undoubtedly limiting its potential impact. Although most hospitals were trying to adopt an organisationwide approach to quality management, through closer integration of audit, quality, and research activities⁷ this was not automatically leading to successful interdepartmental and interprofessional collaboration. In some hospitals, a failure to clearly delineate the roles and responsibilities of audit staff with regard to nurses leading quality programmes was accentuating and reinforcing longstanding professional and organisational rivalries, and the fragmented approaches to work that the new structures were trying to eliminate.

RESOURCES

The need for time to undertake audit, beyond that allocated to clinical practice, has been widely recognised.^{11 15-17 24} Unsurprisingly, therefore, lack of protected time was perceived to be a major obstacle preventing nurses from undertaking audit. Time may be an even greater issue in carrying out multidisciplinary audit—for example, when group meetings require discussion among a wide range of professions. Different approaches to "round table" team meetings may be a more effective and efficient use of time, and were being used by some audit support staff. Establishing the support of key people in unidisciplinary group discussions initially²⁸ may be a potentially useful starting point for multidisciplinary audit.

Although secondments to audit departments and extra staff cover were being used in some hospitals, this was unusual and could be exploited more fully to create staff time. Whether nurse managers choose to resource such activity, however, will depend on their commitment to audit and whether other service demands have priority on resources.

The benefits of skilled audit facilitators to support nurses to undertake audit have been reported.²⁹ An effective system of support to which all participants have equal access reduces the time needed to undertake audit, and most primary care, hospital, and community provider audit groups now use audit support staff. Nurses need to ensure that they maximise their use of these expert resources, as many of their medical colleagues have successfully done.

KNOWLEDGE AND SKILLS

Lack of knowledge and skills were also important factors contributing to difficulties in undertaking both nursing and multidisciplinary audit. Widely varying abilities create imbalance within a team,³⁰ the less knowledgeable and experienced members may lack the confidence to contribute actively. Given the size of the nursing profession, and the turn over of staff, nurses' needs for education and training to undertake effective audit are substantial. The contribution of audit support staff in meeting these educational needs was recognised although constraints on resources placed limits on what could realistically be provided. The numerous opportunities for continuing professional development should be supporting this form of training by routinely incorporating aspects of teaching audit into existing education programmes. This would be a more efficient use of limited training resources, while reinforcing the concept that audit is central to professional practice.

EFFECTIVE TEAMWORK

Whether genuine multidisciplinary audit existed depended to a large extent on the quality of existing interprofessional relations. Making audit effective and managing change relies on successful teamwork.⁶ In primary health care, community services and in some acute specialties, a longstanding emphasis on teamwork may have fostered the conditions necessary to establish multidisciplinary audit more easily than in some other healthcare settings. Although policy has strongly encouraged different disciplines to work together in undertaking audit⁴ initial expectations that this would evolve either naturally or rapidly have probably been unrealistic.⁵ Tensions arising from different professional perspectives and the hierarchical structures which still existed in many organisations, presented major obstacles to establishing collaborative audit, particularly in acute services. Within well functioning teams, however, interprofessional differences were more readily tolerated and the benefits of collaborative working were recognised.

Clearly, some audit support staff were sceptical about the extent to which their purchasers were truly committed to the concept of multidisciplinary audit. Unless the principles of team working are supported at the wider, organisational level, the conditions to support collaborative work locally will be much more difficult to achieve. However, the motivation to work collaboratively also needs to emerge from the teams themselves. Teams can be at different stages of development and some may require support—for example, through an external facilitator.^{31 32} Initially, time may need to be spent breaking down interprofessional barriers before the task of undertaking the audit can begin and audit support staff can provide an important function facilitating this process.³²

Conclusion

Audit is now an expected part of routine clinical practice yet our findings suggest that whereas many nurses were perceived to be

enthusiastic supporters of audit, several structural, organisational, interprofessional, and intraprofessional factors was still impeding progress. If the ultimate goal of audit is to improve patient care, the obstacles that make it difficult for the largest group of professionals in the NHS to contribute actively to the process must be recognised and considered. Some of the structural concerns that were raised could be resolved relatively easily, given sufficient organisational commitment. Obstacles stemming from ingrained cultural differences and poor collaborative work present much greater challenges to hospitals, community providers, and primary healthcare teams, but understanding how to overcome them is crucial if genuine improvements in patient care are to be realised.

Funding for this project was provided by the former North West Regional Health Authority. We thank all those who participated in this study and Hilda Parker and Richard Baker for their helpful comments on an earlier version of this paper.

- 1 National Health Service Management Executive. *A vision for the future*. London: Department of Health, 1993.
- 2 National Health Service Executive. *Promoting clinical effectiveness. A framework for action in and through the NHS*. Leeds: NHSE, 1996.
- 3 Department of Health. *Clinical audit in the nursing and therapy professions*. London: Department of Health, 1994.
- 4 Department of Health. *The evolution of clinical audit*. London: Department of Health, 1994.
- 5 National Health Service Executive. *Clinical audit in the NHS. Using clinical audit in the NHS: a position statement*. Leeds: NHSE, 1996.
- 6 Clinical Outcomes Group Primary Health Care Clinical Audit Working Group. *Clinical audit in primary health care*. London: Department of Health, 1994.
- 7 Department of Health. *Achieving an organisation wide approach to quality*. London: DOH, 1993. (EL(93)116.)
- 8 Rumsey M, Walshe K, Bennett J, et al. *The role of the commissioner in audit. Findings of a national survey of commissioning authorities in England*. London: CASPE Research, 1994.
- 9 Haynes B, Sackett D, Gray Muir J, et al. Transferring evidence from research into practice. 1. The role of clinical research evidence in clinical decisions. *Evidence-Based Medicine* 1996;1:196-7.
- 10 Kerrison S, Packwood T, Buxton M. *Medical audit: taking stock*. London: King's Fund Centre, 1993.
- 11 Buttery Y, Walshe K, Coles J, et al. *The development of audit. Findings of a national survey of healthcare providers units in England*. London: CASPE Research, 1994.
- 12 Buttery Y, Walshe K, Rumsey M, et al. *Provider audit in England: a review of 29 audit programmes*. London: CASPE Research, 1995.
- 13 Chambers R, Bowyer S, Campbell I. An evaluation of the quality of medical audit in primary care in Staffordshire. *Quality in Health Care* 1995;4:178-83.
- 14 Baker R, Hearnshaw H, Cooper A, et al. Assessing the work of medical audit advisory groups in promoting audit in general practice. *Quality in Health Care* 1996;4:234-9.
- 15 Willmot M, Foster J, Walshe K, et al. *A review of audit activity in the nursing and therapy professions. Findings of a national survey*. London: CASPE Research, 1995.
- 16 Eccles M, Deverill M, McColl E, et al. A national survey of audit activity across the primary-secondary care interface. *Quality in Health Care* 1996;5:193-200.
- 17 Morrell C, Harvey G, Kitson A. Practitioner based quality improvement: a review of the Royal College of Nursing's dynamic standard setting system. *Quality in Health Care* 1997;6:29-34.
- 18 Baker R, Robertson N, Farooqui A. Audit in general practice: factors influencing participation. *BMJ* 1995;311:31-4.
- 19 Cheater F M, Keane M. *An evaluation of the development of clinical audit in the North West Region*. Leicester: Eli Lilly National Clinical Audit Centre, University of Leicester, 1996. (Research Report No 6.)
- 20 Krueger R. *Focus groups. A practical guide for applied research*. California: Sage, 1988.
- 21 Siedel J, Kjolseth R, Seymour E. *The ethnograph. A user's guide (V 3.0)*. Amherst, MA: Qualis Research Associates, 1988.
- 22 Black N, Thompson E. Obstacles to medical audit: British doctors speak. *Soc Sci Med* 1993;36:849-56.
- 23 Lord J, Littlejohns P. Impact of hospital and community provider based clinical audit programmes: perceptions of doctors, nurses, and other health professionals. *Int J Qual Health Care* 1996;8:527-35.
- 24 Robinson S. Audit in the therapy professions: some constraints on progress. *Quality in Health Care* 1996;5:206-14.
- 25 West MA, Slater JA. *Teamworking in primary health care: a review of its effectiveness*. London: Health Education Authority, 1996.
- 26 Department of Health. *Primary care: delivering the future*. London: HMSO, 1996.
- 27 Kitson A, Harvey G, Morrell C. Does clinical audit improve the quality of nursing care? In: Walshe K, ed. *Evaluating clinical audit: past lessons, future directions. Proceedings of a conference organised by the Royal Society of Medicine and CASPE Research*. London: Royal Society of Medicine, 1995: 23-39.
- 28 Ever R, Golton I, Hodgkin P, et al. *Learning from FACTS. Lessons from the framework for appropriate care throughout Sheffield (facts) project. SCHARR*. Sheffield: University of Sheffield, 1997. (Occasional Paper No 97/3.)
- 29 Kitson A, Harvey G, Hyndman S, et al. *The impact of a nursing quality assurance approach, the dynamic standard setting system (DySSSy) on nursing practice and patient outcomes (the ODySSSy) project*. Oxford: National Institute for Nursing, 1994. (Report No 4, Vols 1,2,3.)
- 30 Engel C. A functional anatomy of teamwork. In: Leathard A, ed. *Going inter-professional. Working together for health and welfare*. London: Routledge, 1994:64-74.
- 31 Hearnshaw H, Baker R, Robertson N. Multidisciplinary audit in primary healthcare. *Quality in Health Care* 1995;3:164-8.
- 32 Carroll L, Thirlwell M, Wilson A. Medical audit and the role of the facilitator. *International Journal of Health Care Quality Assurance* 1994;7:8-10.