

Assessing the work of medical audit advisory groups in promoting audit in general practice

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Abstract

Objectives—To determine the role of medical audit advisory groups in audit activities in general practice.

Design—Postal questionnaire survey.

Subjects—All 104 advisory groups in England and Wales in 1994.

Main measures—Monitoring audit: the methods used to classify audits, the methods used by the advisory group to collect data on audits from general practices, the proportion of practices undertaking audit. Directing and coordinating audits: topics and number of practices participating in multipractice audits.

Results—The response rate was 86.5%. In 1993-4, 54% of the advisory groups used the Oxfordshire or Kirklees methods for classifying audits, or modifications of them. 99% of the advisory groups collected data on audit activities at least once between 1991-2 and 1993-4. Visits, questionnaires, and other methods were used to collect information from all or samples of practices in each of the advisory group's areas. Some advisory groups used different methods in different years. In 1991-2, 57% of all practices participated in some audit, in 1992-3, 78%, and in 1993-4, 86%. 428 multipractice audits were identified. The most popular topic was diabetes.

Conclusions—Advisory groups have been active in monitoring audit in general practice. However, the methods used to classify and collect information about audits in general practices varied widely. The number of practices undertaking audit increased between 1991-2 and 1993-4. The large number of multipractice audits supports the view that the advisory groups have directed and coordinated audit activities. This example of a national audit programme for general practice may be helpful in other countries in which the introduction of quality assurance is being considered.

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Keywords: audit, medical audit advisory groups, general practice

Introduction

The potential role of quality assurance in improving the quality of care in general practice is attracting growing interest in the healthcare systems of many countries. In a

recent survey of 17 European countries 13 either had or were planning a national policy on quality assurance.¹ However, only four also had local structures or a legal framework to support quality assurance. The clinical audit programme in England and Wales was found to be one of the most well developed. If quality assurance in different countries is to be effective, information is needed about the progress of those programmes that were the first to be established and which included arrangements for national and local professional structures, funding, and encouragement to take part.

Organisation of general practice in England and Wales

General practitioners in England and Wales each have a registered list of about 1800 patients.

The consultation rate is about four a year

Most general practitioners work in group practices with a mean of about four practitioners plus an associated primary healthcare team

Each general practitioner has a contract with the local health authority to provide general medical services to the patients on their list

Until April 1996 the local health authority is the family health services authority, of which there are 98 in England and Wales

From April 1996 family health services authorities will be merged with local health authorities for hospital services to form new combined health commissions

System for audit in general practice in England and Wales

Advisory groups were set up in England and Wales from April 1991 to promote audit in general practice

Each family health services authority has at least one group. There were 104 in July 1994

The groups are composed of general practitioner representatives plus other people, such as a representative from the local family health services authority, a hospital consultant, a practice nurse, or a practice manager

Each group receives funds from the family health services authority and employs one facilitator or more and administrative staff

The activities undertaken by groups include providing training about audit, circulating newsletters, promoting audit by individual practice teams, and organising audit projects in which large numbers of practices are encouraged to participate

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In England and Wales quality assurance in general practice was launched in the form of medical audit by directives issued by the Department of Health in 1990.² The family health services authority in each area was required to establish a medical audit advisory group by April 1991 with the remit to direct, coordinate, and monitor medical audit activities within all general medical practices. The objective was to persuade all general practices to participate in regular and systematic medical audit. Most advisory groups comprised general practitioners interested in audit who were willing to spend some time working with practices in their area. The participation of general practitioners in audit is voluntary, in contrast to the participation by doctors in hospital practice, which is compulsory. Many advisory groups used their allocated funds to employ lay audit support staff: administrators, facilitators, and audit clerks.³ Substantial sums of money have now been spent in supporting the work of the advisory groups and it is appropriate that information is sought about their achievements.^{4 5}

In a series of studies, Humphrey and colleagues documented the progress of audit from shortly before the establishment of the advisory groups.⁶⁻⁸ In a report published in 1992 they recommended that the remit of advisory groups be enlarged to include the broader objective of service development and that membership should be altered to reflect the many professions involved in primary health care.⁷ More recently Humphrey and Berrow assessed the role of advisory groups in securing improvements in patient care by reviewing the evidence available from several projects of medical audit in general practice,⁹ including a collection of examples of successful audits reported in advisory group newsletters and annual reports.¹⁰ The same authors found wide differences in the approaches taken by the advisory groups; some concentrated specifically on promoting audit whereas others became involved in a wider range of service development activities.⁸

The advisory groups themselves have begun to collect information about audits in general practice with grading systems such as those developed by Oxfordshire¹¹ or Kirklees¹² advisory groups. In these systems, the original definition of medical audit – “the systematic critical evaluation of the quality of medical care, including the procedures used for diagnosis and treatment, the use of resources, and the resulting outcome and quality of life for the patient”¹³ – has been developed to place greater emphasis on completing the audit cycle and implementing change (boxes 1 and 2). Further developments have included assessment of the range of topics considered by audit and the involvement of members of the primary healthcare team.¹⁴ However, no national survey has been undertaken to determine whether advisory groups have monitored audit as required in their remit from the Department of Health² or whether their activities have had an impact on audit in general practice.

Stage	Activity
I	Choose topic
II	Set target standards
III	Observe practice
IV	Compare performance with targets
V	Implement change and plan care
VI	Cycle repeated

Classification

Full audit = at least five stages present

Partial audit = stages I and III present plus either II or IV

Potential audit = stages I and III

Planning audit = stage I plus definite intentions for audit

No audit = no stages present

Box 1 Oxfordshire method of classifying audits¹¹

0	No response from practice
1	Practices that are not collecting data
2	Practices that are collecting data for annual report
3	Practices that are collecting data over and above annual report
4	Practices that have identified a problem
5	Practices that have identified a problem and started audit
6	Practices that have completed an audit which did not involve the full practice team
7	Practices that have completed an audit which involved the full practice team
8	Practices that have completed several audits not involving the full practice team
9	Practices that have completed several audits involving the full practice team
10	Practices that have a rolling programme of audit involving all primary health care team members

Box 2 Kirklees method for classifying audits¹²

Although the advisory groups were given the clear objective of obtaining the participation of all practices they were offered only limited advice about how this should be achieved.² Among the suggestions made by the Department of Health were organising local audit teams and providing appropriate education about audit. In monitoring audit, advisory groups were also required to provide the local health authority with regular reports on the general results of the audit programme, although what was to be the content of the reports was not specified in detail.²

This paper reports the first phase of a study with the overall aim of determining the impact of advisory groups on audit in general practice. The aim of this phase was to discover to what extent advisory groups have fulfilled their remit to monitor audit activity in general practice and to seek evidence from multipractice audit of direction and coordination of audit activity. As well as providing information of value for planning the future development of clinical audit in England and Wales, the findings may also be of interest to those in other countries who are considering the introduction of quality assurance in general practice.

Method

DEVELOPMENT OF THE QUESTIONNAIRE

A postal questionnaire (box 3) was developed to collect information about how advisory groups have (a) monitored audit activity and (b) directed and coordinated audit activity.

<p><i>Section A: Basic questions about the advisory group</i> Advisory group name</p> <p>Number of practices relating to the advisory group</p> <p>Name and position of person completing the questionnaire</p> <p><i>Section B: System used by the advisory group to classify audits in 1993-4</i> Whether any of the following were used (tick box)</p> <p><input type="checkbox"/> Oxfordshire system</p> <p><input type="checkbox"/> Modified Oxfordshire system (please describe)</p> <p><input type="checkbox"/> Kirklees system</p> <p><input type="checkbox"/> Modified Kirklees System (please describe)</p> <p>OR</p> <p>If advisory group's own system was used, which of the following items were noted</p> <p><input type="checkbox"/> Doing audit or not (level not specified)</p> <p><input type="checkbox"/> By level of audit done – for example, complete cycles, data collection only</p> <p><input type="checkbox"/> Where there is practice team involvement</p> <p><input type="checkbox"/> Topics selected for audit</p> <p><input type="checkbox"/> Other (please describe)</p> <p>OR</p> <p>Description of any other methods used</p> <p><i>Section C: Number of practices doing full audit or any audit (see text for definitions)</i> Audit activity in each year 1991-2, 92-3 and 93-4</p> <p>How this information was collected by the advisory group (tick box)</p> <p><input type="checkbox"/> Not collected</p> <p><input type="checkbox"/> Visits by lay facilitators to all practices</p> <p><input type="checkbox"/> Visits by advisory group general practitioners to all practices</p> <p><input type="checkbox"/> Visits to some practices (describe how selected)</p> <p><input type="checkbox"/> Postal questionnaire to all practices</p> <p><input type="checkbox"/> Postal questionnaire to some practices (describe how selected)</p> <p><input type="checkbox"/> Other (please describe)</p> <p><i>Section D: Multipractice audits known to the advisory group (see text for definition)</i> None</p> <p>Topic, start date, end date, how many practices invited, number of practices taking part</p> <p>Any other comments</p>
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Box 3 Questionnaire content

Monitoring audit activity

To monitor an audit, the advisory groups need a system for collecting information from general practices about their audit activities. Questions were therefore included about how information was collected by the advisory groups from practices in the three years 1991-2 to 1993-4. Advisory groups may have undertaken visits to practices, sent a questionnaire to practices to ask about audit, or used a combination of these methods. Advisory groups were also asked to specify whether all practices

or a sample had been selected for data collection.

Further evidence of the monitoring activities of advisory groups is provided by the extent to which they have evaluated audits carried out by practices. Therefore, advisory groups were asked to state whether they had used some form of classification scheme to grade the audit activity from general practices in 1993-4. They were asked whether they had used published schemes such as the Oxfordshire^{11 14} or Kirklees¹² systems (boxes 1 and 2), or whether the advisory group had modified one of these to meet its own requirements, devised its own method, or adopted a completely different method.

The advisory groups were also asked to report the findings of their monitoring of practice audit activity in the three years 1991-2 to 1993-4. They were asked to specify the number and percentage of general practices which had undertaken full or any audit. Full audit was defined as completion of the audit cycle, involving the implementation of appropriate change and a second data collection (equivalent to reaching code V of the six codes of the Oxfordshire scale,^{11 14} or level 6 or better on the Kirklees scale¹²). Any audit included full audits and any other audit activity other than data collection for contractual purposes (defined on the questionnaire as codes I and III present or better on the Oxfordshire scale^{11 14} or level 3 or better on the Kirklees scale¹²). When the advisory group used its own system for classification, it was asked to divide the information into full and any audit or, when this was not possible, to report activity as any audit.

Directing and coordinating audit activity

The use of a classification system for audits not only provides a means for assessing audit activity but also provides some direction of audit by informing practices of exactly what is expected of them. Further evidence for the direction and coordination of audit activity was sought by requesting information about multipractice audits undertaken locally and known to the advisory group. An audit was defined as multipractice if it involved two or more general practices together undertaking the same audit. The advisory group may initiate audits of this type independently or in cooperation with other agencies which are organising the audit, such as local audit groups or audit committees in secondary care.

The questionnaire also asked about other background information such as the number of the practices for which the advisory group was responsible and the name and position of the person completing the questionnaire.

ADMINISTERING THE QUESTIONNAIRE

The questionnaire was pilot tested by submission to 12 audit support staff. A final amended version was sent to all 104 advisory groups in England and Wales, addressed to the chair of the group. These were identified from a regularly updated, complete list maintained by the Eli Lilly National Clinical Audit Centre.

Table 1 Methods used by advisory groups to collect information about audit, 1991-2 to 1993-4. Figures are numbers (percentages) unless otherwise stated

Year	No of advisory groups responding	Collection methods				Not collected
		Visits only (%)	Questionnaires only (%)	Mixed visits and questionnaires (%)	Other methods (%)	
1991-2	71	30(42.3)	11(15.5)	17(23.9)	1(1.4)	12(16.9)
1992-3	81	45(55.6)	7(8.6)	28(34.6)	0	1(1.2)
1993-4	77	43(55.8)	6(7.8)	27(35.1)	1(1.3)	0

About two weeks later, a further postal questionnaire was sent to the advisory groups which had not replied, followed by a telephone call to those still not responding. Results were analysed with SPSS-PC to produce descriptive statistics.

Results

Ninety completed replies were received (86.5% response rate). The responding advisory groups were together responsible for over 8621 general practices, individually ranging from 20 to 297 practices (mean (SD) 98 (56.1) practices).

MONITORING AUDIT

The monitoring activities of advisory groups were assessed by asking whether the groups had collected information about practice audit activity, how such information was classified, and the level of participation as recorded by the advisory group.

Eighty nine (99%) advisory groups reported that they had collected data on practice audit activity in one or more of the three years 1991-4. Sixty (66.7%) advisory groups reported that they had collected, or were in the process of collecting, data from practices about all three years and only one advisory group failed to detail the methods of data collection or report on the levels of participation for any of the three years. The most common methods used were questionnaires or visits, but some advisory groups reported using both of these or supplementing data collection with contact through audit meetings, evaluation forms at

courses and workshops, or telephone interviews. Table 1 shows the reported methods of collection in each year. A total of 32 different combinations of methods were reported over the past three years. Some advisory groups collected data from all practices, but many used samples of practices.

A wide range of methods was used to collect and classify information. Table 2 shows that the Oxfordshire¹¹ and Kirklees¹² systems were used, although many advisory groups reported either modifying these systems or developing their own. Modifications and characteristics of the advisory groups' own systems included recording the number and topic of audits undertaken by each general practice, participation by members of the primary healthcare team, and information about any changes in care that were implemented as a result of audit.

Table 3 shows the median of the percentages of practices that undertook audits as reported by the advisory groups. The median and the lower and upper quartiles indicate an increase in the proportion of practices that undertook any and full audits over the three years. One advisory group reported that 100% of practices had completed full audits in all three years. The overall number of practices that undertook any audit also increased from 2401 practices (57.1% of all practices for the advisory groups that collected information) in 1991-2 to 4754 (86.5%) in 1993-4, and those that completed full audits increased from 822 (40.7% of all practices in those advisory groups that collected information about full audits) in 1991-2 to 1895 (61.4%) in 1993-4.

Table 2 Systems used for classifying audit by advisory groups in 1993-4, showing the characteristics of the advisory groups' own systems where reported

System used for classifying audit	No (%) of advisory groups (n = 90)
Oxfordshire ¹¹	24 (44.4)
Modified Oxfordshire	19 (21.1)
Kirklees ¹²	4 (4.4)
Modified Kirklees	2 (2)
Advisory group's own system noting:	
Level of audit cycle completion	30
Practice team involvement	25
Topics selected for audit	31
Other	11
Total No of advisory groups using own system	40 (44.4)
Not classified	1 (1)

DIRECTING AND COORDINATING AUDIT

To assess their efforts to direct and coordinate audits, the advisory groups were asked about local multipractice audits known to them.

There were 428 different multipractice audits reported by the advisory groups. Only six (6.7%) advisory groups reported that no multipractice audit had taken place in their area. Table 4 shows the most common topics reported for the past three years. Other topics

Table 3 Percentage of practices per advisory group reported as undertaking either full or any audit (any includes full audit and audit that has not completed the cycle)

Year	Full audit			Any audit				
	No of groups identifying practices undertaking full audit	Percentage of practices/ advisory group undertaking full audit			No of groups identifying practices undertaking any audit	Percentage of practices/ advisory group undertaking any audit		
		Median (%)	Lower quartile (%)	Upper quartile (%)		Median (%)	Lower quartile (%)	Upper quartile (%)
1991-2	22	41	21	63	44	71	40	80
1992-3	43	51	36	64	64	84	70	93
1993-4	35	61	48	76	58	91	85	95

Table 4 Topics selected for multipractice audits from 1991–2 to 1993–4, for which five audits or more have been reported

Topic	No of audits	Mean No of practices/audit
Diabetes	68	26.4
Asthma	53	25.0
Hypertension	17	15.8
Coronary heart disease risk factors/health promotion	16	25.7
Benzodiazepines	15	18.9
Prescribing	14	16.2
Epilepsy	14	24.2
Discharge letters	11	8.7
Cervical smears	10	35.6
Patient satisfaction	8	13.0
Secondary prevention of myocardial infarction	8	22.0
Contraception	6	10.0
Cerebrovascular accident/stroke	6	26.0
Leg ulcers	5	17.0
Thyroid	5	9.8
Out of hours care	5	47.0
Smoking	5	45.2
Practice nurse topics	5	17.6
Referrals	5	11.0
Radiology	5	36.7

undertaken by a few of the advisory groups included suicide, bereavement, palliative care, use of vitamin B12, record keeping, stress among general practitioners, hayfever, and schizophrenia.

Discussion

The results of this survey show that most of the advisory groups have been industrious in directing, monitoring, and coordinating audits in general practice over their first four years. It is also clear that audit activity in general practice has increased in quantity and improved in quality over the lifetime of the advisory groups. As an example of a national programme in promoting audit by general practices, the advisory groups have achieved much. The model of a local professional group given opportunity, structure, and funding to develop audit among its peers has been effective and provides an example which could be considered in organisations that provide primary and secondary health care in other countries.

Nearly all advisory groups reported collecting information about practice audit activity to monitor progress. However, no standard method was used by all the advisory groups and some advisory groups used a different method from one year to the next. Questionnaires, visits, and interviews have all been used in different combinations and with various sampling methods. This may have caused variability in the nature and quality of the data collected, presenting problems in making comparisons about participation in audit from year to year in the same advisory group area and between different advisory groups in the same year. The use of a wide variety of methods to collect data from general practices may partly be explained by the fact that the directive which established advisory groups provided no specific instructions about the collection of information or by the variation between advisory groups in the number of practices for which they are responsible. A previous study showed that advisory group funding bears little relation to the number of practices for which groups are responsible.³ It is likely, therefore, that data collection methods

will vary in relation to the resources at the advisory groups' disposal and the circumstances in which they operate. For example, an advisory group responsible for 50 practices is more likely to be able to visit all practices than one responsible for over 250.

The variety of methods used for collecting information on audits makes the confirmation of the absolute level of participation in audits difficult. These problems could be overcome if a standardised method of data collection were used. Therefore, it would be unwise to place too great a weight on the finding that nine out of 10 practices are reported to have undertaken some form of audit in 1993–4. However, although the absolute level of participation is not clear, the findings clearly show that levels have steadily increased. The lower and upper quartiles of the level of participation are likely to exclude those advisory groups which used unusual definitions of audit, and so the increase each year probably confirms the evidence of increased audit activity. Indeed, the increase over the lifetime of the advisory groups may be underestimated. The level of activity reported in 1991–2 should not be taken as a baseline figure for audit levels in general practices before the creation of advisory groups because some general practitioners may have responded to the impending arrival of advisory groups by starting to undertake audits. In one local study in 1990 the proportion of general practitioners who undertook audits was 18%¹⁵ and in a second study it was 40%.¹⁶

The rate of response to the questionnaire was satisfactory and the few non-responding advisory groups were not clustered geographically, by health authority region, or by size. The study therefore provides representative information about the activities of the advisory groups.

In this study, coordination and direction of audit was assessed by identifying multipractice audits in which the advisory group had been involved. Only a few advisory groups reported that no multipractice audits had taken place in their area. A wide range of topics had been considered including those of clinical importance (for example, diabetes and asthma), organisational aspects of care (for example, out of hours care and referrals), and those which may be more difficult to evaluate (for example, bereavement and palliative care). They also included those relevant to the Health of the Nation targets¹⁷ (risk factors for coronary heart disease and suicide) which are not only clinically important but examples of how clinical audit can have a role in implementing national policy. The large number and range of topics considered by multipractice audits support the view that advisory groups have directed and coordinated audits. That is not to say that the organisation of multipractice audits is the only way that advisory groups have coordinated audits.

Policies on coordination can be seen to be reflected in the membership of advisory groups. Previous studies have indicated that most advisory groups have succeeded in forging links with both academic organisations

through representation on the advisory group by clinical tutors in general practice, or those responsible for postgraduate training,¹⁸ and with other parts of the National Health Service through representation from management authorities, public health departments, and hospitals.⁷ Anecdotal reports indicate that an increasing number of advisory groups also involve members of the primary healthcare team other than doctors – such as nurses and practice managers – establishing links with other primary care providers based in the community, and are beginning to have patient representatives, as recommended by Humphrey and Berrow.⁸

Advisory groups have also helped in defining the type of audit expected of general practices. Many advisory groups had used some classification method which enabled them to identify full and any audit, and therefore had not only enabled monitoring of audit activity but also directed what audit activities should be happening. However, different classifications were used by different advisory groups, which led to problems in aggregating data across advisory groups. A standardised classification method would make comparisons easier, but requires a commonly accepted definition of audit. The responses suggest that this does not yet exist. For example, one advisory group reported that 100% of their general practices were undertaking full audits even in 1991. This finding would be unlikely if the definition of audit involved completing the audit cycle. However, it could be explained if full audit were defined as merely collection of data to fulfil the general practitioner's contract. The use of the two classification systems provided by the Oxfordshire advisory group^{11 14} and the Kirklees¹² advisory group may provide the starting point for a common operational definition of audit.

This study provides encouraging information about the activities of the advisory groups. The efforts they have expended on classifying audit and seeking information from general practices indicate that they have

successfully taken on the task of monitoring audit in general practice. The number of multi-practice audits is considerable and provides evidence that advisory groups direct and co-ordinate audits. Although the absolute level of participation is unclear, levels as reported by the advisory groups have steadily increased over their lifetime. Research is now needed to confirm the amount of participation and to determine whether the work of the advisory groups has led to benefits in patient care.

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