KING's FUND CENTRE

MEDICAL AUDIT IN GENERAL PRACTICE

A PRACTICAL GUIDE TO THE LITERATURE

Jane Hughes and Charlotte Humphrey

MEDICAL AUDIT SERIES 3

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Medical Audit in General Practice

A Practical Guide to the Literature

Jane Hughes and Charlotte Humphrey

August 1990
King's Fund Centre for Health Services Development

North West Thames
REGIONAL HEALTH AUTHORITY

First published in August 1990

ISBN 0 903060 75 2

Published by the King's Fund Centre
126 Albert Street, London, NW1 7NF

FOREWORD

This book continues the King's Fund Medical Audit Series. It was commissioned jointly by North West Thames Regional Health Authority and the fund's Primary Health Care Group. The idea arose from our discussions about the part the region could play in encouraging medical audit in general practice.

A good starting point seemed to be to pull together what is known about audit in general practice in a way that would be helpful for general practitioners and family practitioner committees, who are now responsible for developing audit. This is what Jane Hughes and Charlotte Humphrey have succeeded in doing. They describe and assess nine different techniques of audit, and use case studies to bring these techniques to life. They ask what is meant by audit, what it includes and who should be involved in it. They examine the potentially conflicting functions of medical audit advisory groups, and suggest ways in which family practitioner committees and regional health authorities can support them.

Their study is based on a review of the UK literature, and therefore runs the risk of reinforcing the bias in the literature, which inclines towards data gathering and measuring performance rather than implementing change or drawing out lessons for others. The authors are clear about these dangers and encourage medical audit advisory groups to set realistic goals which will counter the impression given in much of the literature that audit is about research and is not something for the average practice wanting to solve day-to-day problems. They go on to identify some of the essential components of any strategy to develop audit as a means of improving patient care.

By April 1991 all family practitioner committees have to set up medical audit advisory groups. We hope this book will be of use to them and the many others interested in raising standards of care.

As we go to press the legislation is being passed which will change family practitioner committees into family health services authorities. We have therefore taken the decision to change the name in the text in the hope that it will quickly, if not easily, come into common usage.

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ACKNOWLEDGEMENTS

This report was commissioned jointly by the Primary Health Care Group at the King's Fund Centre for Health Services Development and the Department of Public Health Medicine at North West Thames Regional Health Authority. The authors are grateful to Rosemary Beardow, Pat Gordon and Jackie Spiby for the guidance and support they have given throughout the project. Special thanks are also due to those who commented on various drafts of the report: Pamela Constantinides, Geoffrey Rivett, David St George, Sue Shaw and Charles Shaw. Figure 2 (on p. 35) is reproduced with the kind permission of the British Journal of General Practice.

CONTENTS

INTRODUCTION

In medicine there is a strong tradition of examining the process, results and organisation of clinical practice to find ways of improving patient care. Current ideas about medical audit have grown out of that tradition. Although the majority of general practitioners have yet to embark on audit, some pioneers, encouraged by the Royal College of General Practitioners (RCGP) over many years, have developed methods of measuring, comparing and assessing their practice. A substantial literature reports the results. What is new is widespread acceptance of the term 'audit' to describe these initiatives, and the emphasis in current health policy on medical audit as a means of raising standards of care and increasing GPs' accountability.

This report outlines current policy developments relevant to audit in general practice and describes the present state of the art in this area of quality assessment, with a view to stimulating ideas and discussion among all those with an interest in the future development of general practice audit. As a resource document in a rapidly changing field it is intended to be of practical use in clarifying the range of activities and objectives that general practice audit might include and assisting in the development of strategies for audit. The report is based on a review of published literature, mainly from the UK.

The report has four sections. The first briefly describes current government policy and plans for implementation. The second discusses what is meant by medical audit and defines terms. The third and main section of the report explores the scope and limitations of various approaches to audit and other forms of quality assessment currently being used in general practice. Different approaches are illustrated by a selection of case studies presented in the Appendix. The final section draws together some themes from the review and raises further questions about the development of audit in primary care.

THE POLICY CONTEXT

The Green Paper on primary health care, published in 1986, laid the foundations for the changes that are now being made to the GP contract and the management of family practitioner services.[1] It set the policy objectives of reducing variation in the quality of general practice by 'bringing up the worst' to the standards of the best; increasing the accountability of GPs; improving value for money and containing costs; and making services more responsive to consumers. One of its most controversial proposals was the 'good practice allowance' linked to 'peer review arrangements' for GPs. This idea was dropped from *Promoting better health*, the White Paper which followed in 1987, in which 'experiments in voluntary peer review' were given only a passing mention and a promise of financial support.[2]

Medical audit for all

The issues of raising standards of care and professional accountability were tackled much more directly in the 1989 White Paper *Working for patients*.[3] One of its central proposals was that all doctors should participate in regular, systematic medical audit. The White Paper also promised to make medical audit a contractual obligation for GPs, 'once satisfactory arrangements are in place locally'.

Although audit is seen as a professionally-led, educational activity, links with management are to be secured by establishing advisory groups in each district health authority and family health services authority (FHSA) to plan and monitor medical audit programmes. In primary care, each FHSA is to set up a medical audit advisory group (MAAG) by April 1991 that will be 'accountable to the FPC for the institution of regular and systematic medical audit in which all practitioners take part, perhaps facilitated by the existence of local groups. The objective is the participation of all practices by April 1992'.[4]

FHSAs and quality

Developing medical audit is just one of many new tasks for FHSAs. Since 1985, family practitioner committees, now FHSAs, have had responsibility for managing and planning family practitioner services, including monitoring the level and quality of provision. The two White Papers strengthen the managerial role of FHSAs. They will be responsible for monitoring and improving standards of care and ensuring that GPs meet the obligations of the 1990 contract. They will have greater control over budgets for premises and ancillary staff. FHSAs will also be expected to assess local health needs and to discover whether services are meeting public expectations by directly seeking patients' views.[5] FHSA managers recognise the conflict between the tasks of monitoring and enforcing the new contract on the one hand, and facilitating voluntary activities such as audit and service development on the other. To cope with these tensions, FHSAs may need to build their own 'Chinese wall', which gives sufficient organisational insulation between different activities to generate trust between the FHSA and its contractors.[6] Tensions similar to those between the monitoring and enabling roles of the FHSA may also surface in the work of MAAGs.

The role of MAAGs

The framework for audit and establishing MAAGs was elaborated in a circular from the Department of Health (DoH), *Medical audit in the family practitioner services*, which specified the membership and responsibilities of MAAGs.[4] They are to appoint a team or teams 'for assisting practices in the development of medical audit. The duties of the audit teams will include reporting to the MAAG on the system of audit in each practice.' Strong emphasis is also placed on MAAGs 'establishing appropriate mechanisms to ensure that problems revealed through audit are solved and that the profession plays a full part in this.'

The brief for medical audit given to FHSAs and MAAGs is very broad and is likely to be translated into many different kinds of initiative in practice. To fulfil all their responsibilities MAAGs will need to develop four distinctly different and potentially conflicting functions.

- The most clearly articulated function for MAAGs is **facilitation**: helping individual practices to set up and develop their audit activities.
- An explicit part of the brief for MAAGs is to 'ensure changes in professional practice when these are required'.[4] The DoH circular envisages MAAGs **stimulating change** and improving professional practice by making links with those responsible for education and training of GPs. However, audit may reveal problems other than inadequacies in professional performance, and solving these may be beyond the scope of individual GPs. For example, long-standing or intractable problems in the organisation of hospital or community services may be confirmed by the results of audit. The MAAG must report on its findings to the FHSA and 'may also inform other bodies which may have an interest in its findings, for instance those responsible for service provision and postgraduate education'.[4] This statement seems to underrate the potential of MAAGs for bringing about change. A much more active approach to problem-solving would include MAAGs making direct inputs to FHSA policy-making and service development and establishing regular contact with managers of health authority preventive and community services, hospital diagnostic facilities, outpatient departments and local authority services.
- The DoH circular states that MAAGs are to 'direct, co-ordinate and monitor medical audit activities within all general medical practices in their area'.[4] They will be responsible for designing a programme of medical audit activity and assessing its effectiveness. MAAGs must clearly **develop a strategy** rather than simply proceed with *ad hoc* facilitation of audits within individual practices. This requires an overview of the quality of primary care services in the area; precise, realistic and relevant objectives; and appropriate methods for achieving them.
- If audit eventually becomes a contractual obligation for GPs, it is likely that only MAAGs will be in a position to say with confidence who conforms. In effect, they will be building up information that could be used for **accreditation** of GPs or practices, a role which could be extended by developing standards for audit. The accreditation function will be emphasised if the MAAG audit teams systematically visit practices to assess their audit activities. A 'visiting team' is an obvious way of gathering information about local initiatives, although the DoH circular does not specify how the audit teams should operate.[4] Where GPs are suspicious of external management scrutiny, a visit may have overtones of an inspection by a regulatory body. This impression would not help MAAGs achieve their goal of spreading audit to the majority.

Responsibilities of RHAs

FHSAs are to be accountable to regional health authorities (RHAs), which will be responsible for monitoring FHSA plans and reviewing FHSA performance. The White Paper envisages that a medical audit advisory committee at regional level will 'advise on and support the development of audit' in the region.[7] A more precise role for RHAs in relation to medical audit in general practice has yet to be defined. Draft guidance from the DoH in the circular on audit for hospital services suggests that it will include 'facilitation of collaborative audit between the hospital and community health services and primary care'.[8]

As well as encouraging the development of inter-organisational audit, RHAs could promote exchange of ideas and joint working between FHSAs, since all MAAGs must define an audit strategy and find appropriate methods of implementation. In particular, RHAs might give guidance to MAAGs on how to manage the tensions inherent in helping practices develop audit and in monitoring and assessing those developments.

Striking a balance

In summary, the government has given clear policy guidance about raising the standards of general practice and increasing the accountability of GPs. A variety of measures are being introduced to achieve these aims, including a new contract for GPs; greater managerial control over family practitioner services, especially in relation to ensuring their quality; and the involvement of all GPs in medical audit. FHSAs will play the central role in implementing all these measures. Their success is likely to depend on striking the right balance between the potentially conflicting tasks of enforcing the contract, ensuring service quality and facilitating audit.

WHAT IS MEDICAL AUDIT ?

Audit has become an accepted part of health service jargon. Medical audit — within certain limits — is generally seen to be a good thing, but there is great potential for confusion and misunderstanding about what it entails. Terminology is a particular problem: there is no consistency in the names used to describe audit and related activities. For clarity it is important to identify the key features that medical audit implies; to differentiate it from other terms in common use; and to explore how the term is being used, particularly by GPs.

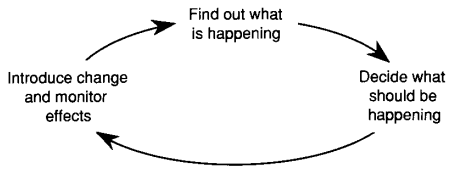
Defining terms

Medical audit is widely used as shorthand to describe all or part of the complex process of measuring, evaluating, attempting to improve and monitoring change in the quality of care provided by doctors. Some advocates of audit argue that it should be used much more specifically, because 'medical audit is a precise and scientific term describing a well-defined and rigorous discipline'.[9] They see audit as a specialised part of quality assurance, referring to practitioners themselves reviewing the care they provide, usually with an emphasis on its technical rather than interpersonal aspects, and with the aim of improving its quality. Medical records are a commonly used source of information for audit. Certain key features, or a distinctive sequence of events, characterise audit and distinguish it from other forms of measurement, review, evaluation or research. These are:

- defining standards, criteria, targets or protocols for good practice against which performance can be compared
- systematic gathering of objective evidence about performance
- comparing results against standards and/or among peers
- identifying deficiencies and taking action to remedy them
- monitoring the effects of action on quality

This sequence is often depicted as a cyclical process, known as the 'audit cycle', which is shown in simple form below.

Figure 1. The audit cycle



All the steps in the process are of equal importance. To reap the benefits of audit the full cycle must be completed and possibly repeated.[10] However, definitions and descriptions of audit currently in use do not necessarily reflect this ideal view. They tend to emphasise particular aspects of the audit process and may not place a high value on completing the cycle.

A frequently used definition of medical audit comes from the White Paper *Working for patients*. Audit is 'the systematic, critical analysis 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'.[3] The definition raises questions about the purpose and scope of medical audit and who should be involved. We discuss these questions here with special reference to medical audit in general practice.

The purpose of audit

Some aims of audit have been defined by Shaw: 'Its purpose is to identify opportunities and implement improvements in the quality of medical care; medical training and continuing education; and effective use of resources'.[11] The accent Shaw places on improvement and change contrasts sharply with the emphasis in the general practice literature on measuring and identifying variations in performance. Many published examples of audit in general practice do not mention whether or how findings were translated into action.

Shaw's statement also makes explicit the idea that medical audit can serve the dual purposes of professional development and improving patient care or service development. Indeed, in most situations, the two are likely to be linked. However, these aims are less likely to be met if audit is carried out by GPs or practices in isolation. It must be integrated with the wider framework of education and training (i.e. with medical schools, RCGP faculties, etc.) and with service development and planning (via FHSAs, health authorities and local authorities).

The RCGP has particularly promoted the role of audit in education and training, as well as emphasising its place in improving standards of patient care. In 1983 the RCGP launched its 'Quality Initiative', with the aims of encouraging GPs to describe their work and to define objectives and monitor the extent to which these are met. Audit by all GPs was seen as central to achieving these aims.[12]

Audit may, of course, serve other purposes. For example, it may be a means of securing accountability and controlling individual practitioners or certain of their activities. Defining audit in terms of review by peers and as primarily an education activity removes some of the more threatening possibilities for control by those outside the profession. However, audit is clearly being seen by both doctors and government as a mechanism for quality control and accountability. The RCGP and the General Medical Services Committee (GMSC) of the British Medical Association have supported audit as a means of professional self-regulation, but were unable to convince the government that voluntary measures would be effective.[13] The requirements of the 1990 contract and greater managerial powers for FHSAs may be seen as external means of control and accountability.

A distinction is often made between internal and external audit, and this can be a source of confusion. Shaw helped to clarify the relationship between different types of review activity in health services by placing them in a framework with two dimensions: internal/external and clinical/non-clinical.[14] He showed that there is a continuum between internal, clinical medical audit and external, non-clinical inspection: the former being characterised as voluntary, educational and without sanctions; and the latter as statutory and regulatory, with implied sanctions. Marinker highlights the differences more graphically: 'The more

external the audit becomes, the more others are drawn into making judgements and the more threatening it is to those who are judged. In the extreme case, those making the judgements may use the mechanism to control the status, income or job security of doctor, nurse or group'.[15]

Metcalfe has pointed out that GPs, FHSA managers and government are likely to have different intentions in relation to audit: 'The government will hope to find out what it is getting for its money; general practitioners will want to close the gap between what they think they are doing and what actually gets done; and managers will want to use audit to drag the tail of the caterpillar towards the head. A programme with three different goals is fraught with problems'.[9] He proposes a 'two-track' programme of internal and external audits, with different aims, methods and participants. However, external audit carried out routinely and involving managers is perhaps more properly called 'monitoring', reserving the term 'audit' for peer review by clinicians.[16] For example, use of the term audit in relation to FHSAs ensuring that GPs meet the requirements of the new contract has created a great deal of perhaps unnecessary controversy. Monitoring seems a more appropriate term for this solely managerial activity.

The scope of audit

Diagnosis, treatment, outcome and quality of life for the patient are listed in the White Paper definition. Many published examples of audit in general practice focus on treatment, especially prescribing. Some investigate outcomes for patients, or at least seek patients' views, and a few evaluate diagnostic skills. However, a substantial number look at other important aspects of general practice, such as preventive and anticipatory care, and the organisation of services.

Use of resources is also mentioned in the White Paper definition. This has usually been considered to be outside the scope of medical audit,[17] although the royal colleges have accepted that one of the aims of audit is to make effective use of resources.[11] Linking medical audit and resource management may make good sense in general practice, because GPs are not only clinicians but also managers responsible for the finance, organisation and staffing of their practices. The government's definition foreshadows plans for practice funds and for GPs to hold and be accountable for indicative prescribing budgets.[18, 19]

Who should be involved in audit ?

The White Paper makes it clear that audit is principally a matter for doctors: 'The quality of medical work can only be reviewed by a doctor's peers'.[7] Most definitions of medical audit assume the involvement of a peer group (usually defined as colleagues doing similar work) in the process, which removes the threat of external scrutiny of professional activity. This may be reassuring to doctors, but the idea of peer review conceals a variety of meanings and possibly a spectrum of acceptability. Schofield and Pendleton have distinguished three ways in which the term is used: assessment by one's peers; assessment against criteria of good practice agreed by one's peers; and assessment against levels of performance that are average amongst one's peers.[20] Not all doctors are likely to be considered by a GP as peers. In particular, members of MAAGs may have their motives and

allegiances questioned by GPs. Independent medical advisers to FHSAs, whose remit includes scrutinising prescribing or referrals, may have to establish their credibility as colleagues.

In general practice, audit often does not involve comparison with a peer group. Even where information about other GPs' work is used for comparison, doctors do not necessarily meet the peer group with whom they are comparing themselves. The popularity of self-audit reflects the relative isolation of many GPs, who may find difficulty identifying a local and conducive group of colleagues. Self-audit is also one of the most internal and private forms of audit and therefore one of the least threatening.

Some writers make a distinction between medical audit and clinical audit. The latter covers all aspects of clinical care, including that provided by nursing and paramedical staff. The former includes only activities initiated directly by doctors.[17] In primary care, where high value is placed on teamwork and the division of labour may not be so rigid as in many hospital settings, it might be expected that clinical audit — a team activity — would predominate. In fact, much of the literature on audit in general practice is about doctors reviewing their own work, although there are some examples of doctors investigating the work of practice staff. Examples of clinical audit, with multidisciplinary groups of staff involved at all stages in the process, are rare. However, a model of audit for primary care teams has recently been offered by Baker and Presley.[21]

Patients, too, have had only limited involvement in audit in general practice. They are usually restricted to the passive role of responding to questions about the care they have received. A more active role for patients — for example, in setting standards, assessing performance and monitoring progress — has yet to be developed.

GPs and audit

GPs' independent contractor status and the nature of their work mean that they are likely to be involved in activities that cut across the boundaries of medical audit, clinical audit and resource management. The growing literature on medical audit in general practice includes many different types of initiative, covering many aspects of practice, involving a wide range of participants and serving a variety of purposes. Some reports describe activities that conform relatively well to the ideal view of audit described earlier. Others claim to be audit but complete only part of the audit cycle, typically going no further than collecting and analysing information about performance. To confuse the picture further, there are many other initiatives involving review, evaluation and service development in general practice which have avoided the audit label but may contribute to establishing the conditions in which audit will flourish. These include describing what goes on in practice; setting standards; defining objectives; and reviewing and improving records systems.

AUDIT IN GENERAL PRACTICE

This review of the range of audit-related activities in general practice is based entirely on published material. Articles, papers and other publications included in the review were selected by a combination of procedures. Relevant articles and other reports were initially identified by scanning the past four years' issues (1986 to early 1990) of the *British Medical Journal* and the *Journal of the Royal College of General Practitioners* (now the *British Journal of General Practice*). The two other major sources of information were RCGP publications and working papers and government documents. References from each of these sources to material published earlier or elsewhere were also followed up.

Limited time prevented us from searching the substantial literature on medical audit from North America and Australia, although we recognise that this work has been influential in the UK. We were also unable to follow up initiatives in this country about which nothing has been published, and this omission will inevitably have distorted our view. We were unable to judge the extent to which the literature misrepresents what is actually going on on the ground, but some of the biases are clear. The criteria for publication in academic journals are likely to include sound research techniques and innovative methods or new findings, which will be of relevance and value beyond the particular circumstances of the study reported. Audit which provides 'precise information in a particular setting' to 'enable rational policy decisions to be made' may well not meet these criteria.[22] Moreover, GPs carrying out small qualitative investigations and local versions of studies already carried out elsewhere may not have publication as an objective. RCGP publications will be more oriented towards general practice audit, but are likely to concentrate on initiatives linked to the activities of the college and its members. What is missing from our view, therefore, is a sense of how much relatively small-scale, unsung audit activity is going on in general practice at large.

In selecting initiatives for inclusion in the review, our interpretation of relevance to general practice audit was extremely broad, since the aim was to be comprehensive rather than exclusive. Rather than measuring projects against a predetermined definition of what medical audit should include, we wanted to find out how the term was being used in general practice. Rather than being confined by terminology, we chose to include the whole range of activities leading to information which might assist individual GPs in judging the quality of and the need for changes in their practice, whether or not these activities were defined as audit or any of the related terms.

This broad approach inevitably produced an extremely large collection of examples, whose wholesale inclusion in the report would have produced a most unwieldy document. We have not therefore included everything we found, and this report does not contain a comprehensive bibliography. Instead we have selected a relatively small number of studies to reflect the range of activities and to illustrate specific points. Some examples have been chosen as models of good practice and several such case studies are described in detail in the Appendix. Other examples have been included because they show up limitations.

A number of alternative frameworks could be used to structure a review of this kind. Activities might be grouped by their relevance to the assessment of structure, process or outcome in general practice; they might be categorised by the subject of the assessment (for example, doctor, patient, practice or disease); they might be considered in terms of the different methods of investigation used. The framework adopted here combines aspects of each of these systems of categorisation, since our aim was to reflect, as accurately and comprehensively as we could, the diversity of activity in the field with regard to sources of data, forms of investigation, subjects of study and intended outcomes.

Nine major areas of activity were identified for inclusion in the review

- **1 Practice activity analysis**
- **2 Case analysis**
- **3 Disease and process audit**
- **4 Seeking patients' views**
- **5 Service indicators and the use of routinely available information**
- **6 Working in peer groups**
- **7 Practice visiting**
- **8 Practice annual reports**
- **9 Facilitation**

Each of these activities is discussed in turn under the following headings

(i) **Description of approach**

(ii) **Scope** — Including what aspects of practice may be studied in this way; who is likely to be involved; and for what purposes the activity may be used.

(iii) **Resources** — Including consideration of any information or procedures that may be necessary to make the undertaking feasible; assessment of the time, effort and expertise required; and financial implications.

(iv) **Assessment of approach** — Ultimately it may be more important to consider the value of each activity in its own terms than to judge whether or not it qualifies as audit. However, to clarify the field and aid comparison between approaches, the view of the audit cycle defined earlier is used as a yardstick against which to compare the strengths and weaknesses of each approach.

■ 1 ■ Practice Activity Analysis

(i) Description of approach

Practice activity analysis (PAA) enables GPs to quantify certain aspects of their performance and compare the results with those of colleagues who have made the same measurements. It involves collecting data prospectively on special recording forms for a specified period or until a quota of patients in a certain category is reached. Data from participating GPs are then pooled and analysed to produce comparable information (usually rates, based on an appropriate denominator such as list size or number of consultations) about individual and group performance. Each participant receives summary statistics of his or her performance, with the group means for comparison. It is up to individual GPs and practices to reflect upon their results, although sometimes the PAA will be discussed by a peer group. PAA is seen as 'a means of facilitating audit by self-evaluation', but it does not in itself constitute audit. The PAA philosophy contains no expectation about the desirability of change. 'Rather it emphasises the need for information to be available in a form that doctors can use to consider their own performance. Change is not necessary; what is needed is that individuals consider facts about their own performance.'[23]

(ii) Scope

What aspects of practice may be studied ?

Any aspect of practice activity that can be relatively easily defined, classified or quantified can be the subject of PAA. Crombie and Fleming state that PAA 'surveys are concerned chiefly with information obtained from the consulting room'.[23] This method is particularly suited to collecting information about common events; it may be less satisfactory for infrequent events because the motivation for collecting data must be sustained over a long period. PAA is often used to collect information about prescribing (particularly antibiotics, psychotropic drugs and repeat prescriptions); to build up a picture of GP workload (including consultation rates, home visits, etc.); and to explore the outcome of consultations in terms of prescription, investigation and referral.

Who is involved ?

Practices may set up their own PAA study [24] or take part in larger schemes organised by a research unit, academic department or FHSA. Individual GPs or partnerships are recruited to pre-defined PAA schemes and data is collated and analysed at a central point. The RCGP Birmingham research unit provided a service to practices throughout the country;[25] Brent and Harrow FPC coordinated a PAA scheme for practices in its area (Case study 1a).[26]

GPs do not necessarily know or meet others participating in a large-scale PAA scheme. However, Crombie and Fleming emphasise the value of discussing results in a peer group as a way of stimulating change. The South East Thames Experiment used a combination of PAA and peer group discussion (Case study 1b).[23]

Brent and Harrow FPC included an analysis of practice nurse activity, but this appears to be the only example of use of the method by other primary care workers.[26]

Uses of PAA

PAA provides basic quantitative information about GP activity and enables comparison with other GPs. By collecting simple numerical data GPs are generating measures of performance. If the majority of GPs were prepared to collect routinely a limited range of PAA-type data and allow it to be analysed centrally, then there would be better service indicators for general practice. (These are discussed in more detail in Section 5.)

PAA has been a particularly important method of quantifying workload and exploring patterns of prescribing and referral. However, as computerised information systems are extended and improved, more of these kinds of data are being collected routinely within practices and by other agencies. For example, the PACT (prescribing analysis and cost) information system can now provide GPs with some data that they would previously have had to collect for themselves, though it is still only a starting point for auditing prescribing.[27] PAA studies are likely to be necessary at least in the short term: Jenkins has estimated that we are ten years away from 'information accuracy', with systems that will provide good quality management information for general practice.[28]

PAA is a basis for audit. The results invariably show wide variations in performance, which may prompt GPs to examine aspects of their work and practice organisation in depth, using approaches such as case analysis (see Section 2) that enable problems to be pinpointed more precisely. PAA has been widely used as a stimulus to peer group discussion (see Section 6 on peer review).

If sufficient GPs in an area are involved, PAA may provide information that is useful to FHSAs and health authorities for planning services, and this was one aim of the scheme set up by Brent and Harrow FPC (Case study 1a). The Birmingham research unit has also used PAA for research purposes, including validating the Third National Morbidity Study in General Practice, and for international comparisons of GPs' work.[23]

(iii) Resources

GPs or practices taking part in PAA must make a commitment to collecting data accurately and completely and either returning the forms to a central point or analysing the data themselves. PAA is designed to require the minimum input of time and effort from participating GPs. However, if PAA is to spread beyond the enthusiasts, encouragement or facilitation of some sort is likely to be needed to recruit GPs to local schemes and to help them get maximum benefit from participation.

Crombie and Fleming argue that PAA requires organisation on a large scale: 'No single group of general practitioners could mobilise the resources and energy for formulating individually suitable items in a self-audit programme. Success requires a large baseline of comparable results from other peer groups'.[23] However, many practices have used PAA successfully on a small scale, particularly for analysing workload and aspects of prescribing. Large-scale

schemes require central administration, including the expertise to design recording forms, analyse data and provide feedback of results. These resources are likely to be found in research units, academic departments of general practice, departments of public health and, increasingly, FHSAs.

(iv) Assessment of approach

The strength of PAA 'lies in its simplicity and economy; its standardised method and ease of recording; its flexibility with the capacity to move from one subject area to another; and its common definitions permitting the aggregation of data from several practices'.[23]

PAA requires GPs to make a special and separate record of information about their activity, preferably during or soon after the activity has taken place. The burden of extra recording may deter some doctors, but those who take part are likely to take an interest in, and be motivated to act on, the results they receive. However, computerisation of practices makes data collection and analysis much easier and quicker.

PAA has proved a popular method of generating information that describes practice. It is not seen as threatening by GPs, perhaps because no assumptions are made about quality and the emphasis is on GPs assessing their own results in relation to the group norm. Participation in PAA does not require cooperation from partners. It can stimulate peer group discussion and prompt more detailed investigation into particular aspects of practice.

PAA results inspire confidence because they are based on a relatively large number of events. Results can be compared among partners and, in large-scale schemes, with the average of many colleagues. However, aggregate information is relatively superficial and may be difficult to interpret in terms of quality. It provides no opportunity to scrutinise individual events: for example, the appropriateness of decisions that have been taken about the care of individual patients.

PAA is of interest to FHSA managers in search of more information about general practice. In future all GPs will need to gather information about referrals to present in their annual reports. FHSAs may seek more details of practice activity by supplying annual report forms on which GPs can volunteer a wider range of data. Consultation numbers and rates would be particularly useful to practices and FHSAs, providing alternative denominators to list size.

PAA may be of greater value as a method of audit if participants discuss standards in advance of receiving results. A recommendation of the South East Thames Experiment was that standard setting be made an integral part of the peer group discussion. A residential course for GPs in the Oxford region has successfully combined standard setting with practice activity analysis.[29] This shifts the focus from spotting deviations from the norm to identifying deficiencies and problems that need further investigation and remedial action: an approach to audit which Baker considers to be more fruitful.[30]

■ 2 ■ Case Analysis

(i) Description of approach

Case analysis is one of the most frequently used methods of investigation in general practice and there are many examples in the literature. Case analysis usually involves the careful scrutiny of a sample of cases selected from practice, sometimes at random, but more often on the basis that they share a particular characteristic. Information from a variety of sources may be considered, either routinely collected or generated specially for the purpose of the analysis.

(ii) Scope

What aspects of practice may be studied ?

Case analysis may be used for any identifiable procedure, event or category. The criterion for selection might be a clinical event, such as death, or a specific symptom, such as abdominal pain;[31] an aspect of care, such as a domiciliary visit or a hospital referral;[32] an aspect of patient behaviour, such as the request to change doctor; or a doctor-defined characteristic, such as the 'heartsink' patients described by O'Dowd (Case study 2a).[33] Case analysis differs from disease audit in that it is not confined to conventional clinical categories or routine procedures for which clinical standards or management protocols may be defined (see Section 3 on disease and process audit).

Who is involved ?

Case analysis may be undertaken by individual practitioners, partnerships or peer groups. It may involve other members of the practice or primary health care team, informal carers, hospital colleagues and social services staff. Case analysis is usually an internal procedure, confined to those who are somehow involved, though it may also be used for educational purposes. Outside general practice, case analysis has also been used on a larger scale, as in the confidential enquiry into perioperative deaths (CEPOD), where data from individual surgeons and anaesthetists was collected and collated in anonymous form.[34]

Uses of case analysis

Random case analysis is an established method of teaching and learning in general practice. Videotaped consultations and reviews of patient records are commonly used for this purpose. Such material may be used in peer review; it may also be part of the data available to assessors during practice visits for purposes of accreditation.

Case analysis of specific events may be used to find out more about what is going on in a particular area of practice. It might, for example, be used following discussions about the results of a practice activity analysis which revealed unexplained variations between partners' prescribing patterns.

Case analysis may be used to examine the appropriateness of decisions or general quality of care for certain patients, to identify problems and to suggest how these might be rectified. Hart and Humphreys, for example, conducted a retrospective

analysis of 20 years of deaths in a general practice to find out how many might have been avoided, and what might have been done by whom to prevent them.[35] Emmanuel and Walter looked at the appropriateness of their referrals to outpatient departments, and identified three areas in which management might be improved (Case study 2b).[32] Used in this way, case analysis may clarify the need for a policy or protocol, and the new procedure, once in place, can then itself be subject to audit.

Finally, case analysis may be used where problems have already been identified or obvious errors have occurred, to find out what went wrong and thus help to prevent recurrence. Metson's study of unplanned pregnancies is an example of this kind (Case study 2c).[36]

(iii) Resources

Case analysis may not require any further information beyond that routinely available in patients' records, though it will often involve extraction and collation from different sources. Such procedures are obviously made easier by good record-keeping or computerised systems. Some investigations, however, will depend on data that are not conventionally available. Hart, for example, unlike most GPs, had retained copies of all death certificates and information from necropsies for patients in his practice.[35] Other studies will require the generation of special databases or the acquisition of extra information from patients.

Demands on the time and effort of those involved, whether GPs, practice staff or others, will be determined by the nature of the study. There will inevitably be some additional work, but in the longer term this may be compensated by the improvements which result. For example, in O'Dowd's study the 'overwhelming mixture of exasperation, defeat and sometimes plain dislike' triggered in the doctors by their 'heartsink' patients was diminished as a result of the investigation.[33] Case analysis may well require extra funds and technical or expert advice regarding collection and analysis of data.

(iv) Assessment of approach

The aim of case analysis may simply be to describe practice. However, it can also identify the need for standards, management plans, targets or protocols, and provide information to help define them. In this sense, case analysis may serve as a necessary precursor to disease or process audit.

The technique of case analysis provides opportunities for comparison among peers and is frequently used in this way for educational purposes. Most published examples report initiatives by individuals or group practices. Where case analysis involves consideration of detailed data which are not collected in a standardised way, there may be practical problems in comparing findings among larger groups.

Case analysis is often used to identify deficiencies and may lead to quite precise recommendations for action. However, suggestions for change are often vague and appear to reflect the assumption that the insights gained will themselves provoke improvement without much further effort. Moreover, the findings of case analysis may point to problems that are beyond the scope of GPs or practice staff to influence directly.

■ 3 ■ Disease and Process Audit

(i) Description of approach

'Disease audit' (sometimes also called 'process audit') usually refers to the assessment of performance in a specific area of clinical practice for which there is a defined protocol. Protocols 'define what we think we should be doing — our objectives — and the processes to achieve them. Objectives are often expressed as criteria (for example, all patients aged over 75 should be interviewed about their repeat treatment every 12 months) and a level of performance set as the percentage of patients in whom this can be achieved. Criterion and performance together constitute a "standard" and the process of reaching agreement is referred to as standard setting.'[37]

The stringency of standards employed in practice assessment of any kind will depend on the purpose of the assessment. Baker suggests that while ideal standards are useful for educational purposes, 'excellent but realistic' standards will be more appropriate for purposes of professional accreditation such as assessment for RCGP Fellowship.[38] For deciding whether to grant or withhold a licence to practice, minimum standards will be used. Standards may be set at some point above this basic level to define thresholds for reward where a system of financial inducements is used. Government proposals for childhood immunisation and cervical cytology targets are examples of the latter.

Protocols and standards may be based on the personal decisions of individual GPs, agreed in the practice or on a more widespread basis, or they may be part of national policy, as in the case of immunisation and cervical cytology. Protocols may involve precise criteria (for example, antenatal care), or they may remain at the level of broad principles (for example, practice policy on prescription of certain dangerous drugs).[39]

Ideally, both protocols and standards are agreed in the practice in advance of the intention to audit, so that the audit assesses the extent to which objectives are being met. In reality, the definition of a protocol is often the first stage of the audit process. The investigation discovers actual levels of performance and targets may be set subsequently in the light of these findings.

Disease audit may involve collection and scrutiny of data by a variety of methods and from a wide range of sources. Review of medical records or 'chart audit' is perhaps the most widely used approach, but information may also be collected directly from GPs, practice staff, patients and carers.

(ii) Scope

What aspects of practice may be studied ?

Any clinical or organisational aspect of practice for which a protocol may be defined can be subjected to audit. Disease audit has been used, for example, to assess the diagnosis and management of chronic illnesses such as epilepsy and diabetes, and acute conditions such as pelvic inflammatory disease;[40–43] screening procedures and follow-up of patients;[44,45] immunisation status;[46] support of carers

(Case study 3a);[47] and use of agreed formularies.[48] In cases where there is little evidence of effective practice on which protocols could be based (such as the management of smoking or obesity), disease audit becomes less feasible.

Who is involved ?

Disease audit may be initiated by an individual practice or a larger group of peers. Alternatively, GPs may be invited to participate in a project initiated from outside: for example, by an academic department of primary care or a pharmaceutical company. The protocols and standards used may be developed and agreed internally or they may be adopted or imposed from outside. The collection and analysis of data may involve any or all members of the primary care team. It is generally agreed, however, that as far as possible, 'data should be gathered by ancillary staff so that the doctors' work is confined to analysing them and effecting necessary changes'.[37] In some cases a practice may recruit an outside team, such as the Oxford-based Rent-an-Audit, to carry out the audit and feed back the results.[44] While patients are sometimes asked to provide information about their care, they have not generally been otherwise involved.

Uses of disease and process audit

The definition and adoption of protocols has some intrinsic benefits. Moulds suggests that establishing a common approach to managing a particular condition aids intra-practice communication; keeps doctors up to date; increases job satisfaction; allows consistent, appropriate management; helps to decrease inappropriate prescribing; enhances patient education and compliance; and encourages audit. 'Over time, workload patterns are altered for the better and time and effort are saved as the wheel is no longer invented each time, for example, a new diabetic or hypertensive has to be sorted out ... Common policies also buttress individual partners in their efforts to change behaviour, and the anxious, uncertain doctor in particular can gain the confidence necessary to manage patients more effectively.'[39] The precise definition of objectives also facilitates identification of aspects of care which may be delegated, so that a more satisfying and rational division of labour can be achieved within the practice team.[42]

Disease audit provides information about the extent of adherence to a protocol and the level of performance achieved. It also provides a check on the appropriateness and the feasibility of the protocol, enables identification of problems and indicates where changes may be needed. Repeated on a regular basis, audit can assess the impact of changes, the degree of improvement achieved and the extent to which improvement is maintained.[49]

Disease audit may be used to make comparisons between practices, although Difford points out that such comparisons are valid only if identical protocols are used.[37] Moreover, when practice populations and local circumstances differ substantially in terms of social deprivation or community resources, comparison may be misleading because the variation will influence how easily standards may be achieved.

(iii) Resources

The process of defining and agreeing a protocol will involve some research and discussion among those involved. The main resources required for the creation of protocols are therefore time and up to date information.

The design of an audit, collection and collation of systematic data through record review, questionnaire or interview, and subsequent analysis may involve considerable time, effort and research expertise. Though not essential, appropriate practice registers and computerised records would certainly make the process simpler. The acquisition of a computer has been found to act as a catalyst for audit and make it a more practical proposition.[50] Difford comments that 'Unlike research data, audit data are not intended to prove a hypothesis and require only as much scientific rigour as is needed to convince the participants of the kinds of changes needed. Audit is not a project in the sense that it has no end; the same audit may be repeated to check that the improvement is maintained. Data for audit should ideally therefore be continuously available as part of the process of care.'[37] It is generally agreed that audit activities which make relatively few demands on staff are more likely to be successful, and certainly more likely to be regularly repeated. For record-based audit, the use of a service such as Rent-an-Audit, where a visiting team does most of the work, minimises the disruption and investment of time by practice staff.[44]

(iv) Assessment of approach

Disease audit is the method of quality assessment in general practice which is most likely to lead to completion of the audit cycle. There are a number of published examples where performance has been assessed against defined criteria on the basis of systematically collected evidence, deficiencies have been identified and acted upon and the audit procedure has subsequently been repeated at least once to assess improvement in the intervening period.[49,51,52] In many such studies, substantial improvements have been noted. These must be interpreted with caution, however, and it should not be assumed that benefits are always attributable to the audit process alone (see Case study 3b). National trends in care and better record-keeping may also contribute to changes identified, and the latter may or may not reflect actual improvements in patient care.

For disease audit to be a practical proposition it needs easily accessible and preferably routinely available data. The limitation of this approach is that it may lead to an over-emphasis on assessing and improving those aspects of practice that are most easily defined, measured and recorded, and concomitant neglect of other less tangible but equally important dimensions of patient care. Medical records are the most commonly used source of data for disease audit, but they provide only limited information about the quality of patient care because much of what takes place in a consultation is not written down. There is some evidence of an association between good record-keeping and good care but, as Baker points out, the relationship is not necessarily causal.[38] The explanation may be that good doctors are more likely to be conscientious about notes.

The number of audit exercises that a practice may undertake simultaneously is clearly limited. There has been some debate about the extent to which the results of audit in one area allow inferences to be drawn about the quality of care

provided for other diseases or aspects of practice. It has been suggested that certain 'tracer' conditions — common, treatable and definable conditions for which there are generally agreed patterns of management — might be audited as indicators of the quality of care provided.[53] The indicator method has been developed mainly in the USA and Canada; it has not been taken up with enthusiasm in this country. In a review of the approach in 1981, Watkins pointed to a number of limitations to its use and expressed scepticism about the prospects for identifying indicators which would be suitable for testing the quality of care in general practice in the UK.[54]

A distinction must be drawn between audit exercises initiated by GPs with the aim of improving patient care in their practices and externally initiated studies which aim simply to document the variation within general practice with respect to the management of a particular condition [40, 43] or to investigate specific aspects such as the GPs' awareness of a new treatment option.[55] Although published as disease audit, the latter seek neither to introduce improvements directly in the practices studied nor to monitor their effects. The goal may be to identify general needs for further education, better protocols or other improvements, but these do not relate to individual practices. In such studies — where the GPs involved do not participate in the setting of standards against which their practice is compared, are not informed of the criteria used, and receive no feedback on their own performance — there is no expectation that the audit cycle will be completed.

■ 4 ■ Seeking Patients' Views

(i) Description of approach

A variety of different methods may be used to explore patients' views, or the views of relatives or lay carers. The most frequently used systematic approach is the questionnaire-based survey. In some cases the choice of answers is predefined; other studies use semi-structured interviews with a number of open-ended questions. There are also some examples of less directive studies using interview techniques in which the patients are left to define the issues and events that are important (Case study 4a).[56] Studies may address patient satisfaction with general practice services as a whole or they may relate to particular aspects of treatment or care.

Most studies are based on asking for patients' opinions about the care they receive. There are also a number of less direct ways of gauging levels of satisfaction. These include looking at patients' compliance with the treatment and advice they receive; and at patients' asking for second opinions, making complaints, changing doctors or seeking help from alternative sources of care.

(ii) Scope

What aspects of practice may be studied ?

Studies of patients' views tend to focus on interpersonal and organisational aspects of care rather than technical or clinical competence, as it is widely assumed that lay people do not know enough to pass judgement on the latter. The fact that lay people do frequently express opinions about all aspects of the care they receive is generally ignored. In fact there is some empirical evidence from studies carried out in the USA that when asked to rate the technical quality of care that has been experimentally manipulated, patients' ratings correspond with those of doctors and nurses. These studies also showed that patients could distinguish higher quality interpersonal care from better technical care. However, patients may be less able to judge the clinical appropriateness of treatment.[57]

Smith's study of his patients' views is typical of many general satisfaction studies in the areas it covers: personal attributes, responsiveness and professionalism of the doctor; practice arrangements for accessibility and availability; attitudes and functions of other members of the practice team; and special areas such as screening, minor operations and women's problems.[58] A study of the views of mothers with young children (Case study 4b) looked at choice of doctor; access to facilities at the surgery; doctor/patient interaction in the consultation; mothers' understanding of the concept of teamwork; services specifically for mothers and children; and a general overview.[59] Both these studies, in common with many others, based their questions on those used by Cartwright and Anderson in their 1981 study *General practice revisited*, which is regarded as a key work in this area.[60]

Specific areas where patients' views have been looked at in greater detail include out of hours care (Case study 4c)[61] and difficulties in obtaining appointments.[62] Much attention has also been paid to aspects of doctor–patient interaction. Receiving inadequate or inappropriate information from the doctor has been found to cause more dissatisfaction among patients than any other aspect of care.[60]

Who is involved ?

Major studies of patients' views of primary care have been carried out by research centres such as the DoH-funded Institute for Social Studies in Medical Care,[60] academic departments[61,63] and patients' liaison groups.[64] The Consumers' Association and pressure groups such as the Maternity Alliance are also active in this field. Many studies are based on samples from the general population or from several general practices, and their results may not be applicable to any particular practice. Studies of local services and individual practices have been carried out by community health councils (CHCs), both independently and at the request of GPs.

GPs have also initiated and carried out their own investigations.[65] As part of implementing the new GP contract it is expected that 'FPCs [now FHSAs] will need to monitor whether services provided are meeting patients' expectations ... to identify any real or perceived weaknesses in current service provision and to develop ... strategies to remedy those weaknesses'.[5] This circular does not specify how FHSAs should approach the task, beyond stipulating that 'a professional approach using properly validated, intellectually defensible methods of carrying out consumer surveys' should be adopted.

The value of seeking patients' views

Studies of patients' views are valuable for many different purposes. They are essential for evaluating those dimensions of care that providers, by virtue of their position, are unable to judge for themselves. They may also be used to identify problems perceived by patients and to canvass opinion about potential solutions and innovations.

Besides giving their opinions about quality, patients can provide valuable factual information about the care they experience. Studies of patients may be used to assess the impact of services by looking, for example, at the extent to which information is understood and advice followed. They may also identify areas of unmet need.[65] Patient studies have been used to validate providers' assessments of quality of care. For example, in the development of measures to evaluate the work of cancer support teams, carers' ratings of patient wellbeing were systematically compared with patients' and relatives' views.[66]

A large number of studies of more general interest have been carried out on many other aspects of patients' views, including knowledge and expectations about illness and treatment, attitudes to prevention and views about the organisation of medical care. Information of this sort is of value for interpreting and predicting patients' responses to care. However, such studies are not usually designed to provide information specific to the patients of particular practices.

(iii) Resources

The resources needed for studies of patients' views will depend on the scale and complexity of the study and the type of research method employed. Practice records and patient registers may be needed to identify samples of patients; alternatively, patients may be selected opportunistically as they appear in the surgery.[56] Data may be collected by any means, from postal questionnaires to detailed interviews. Patients may be less willing to criticise if members of the health team are perceived to be directly involved in the study. In most cases, therefore, outside researchers will need to be involved. Standardised and validated questionnaires and interview schedules are available for studying some areas of general practice, and basic guides on how to conduct surveys may also be obtained.[67, 68] Research advice may be needed on how to adapt schedules or develop new measures. Some statistical and computing expertise will often be necessary for analysing data.

(iv) Assessment of approach

If the quality of care provided by general practice is to be accurately assessed, it must take account of the patients' views. The main problem with patient satisfaction studies, however, is that patients appear to be unwilling to admit to being dissatisfied.[69] It has been suggested that high levels of general satisfaction can often mask a fair amount of unhappiness with specific aspects of care.[70] There is some evidence that older people are more likely to say they are satisfied, but it is not obvious whether this reflects a better service or lower expectations. Similarly there is an association between levels of satisfaction and patients' social class, and the part played by differing expectations is again unclear. If satisfaction studies are to be used for audit, therefore, the results need to be interpreted with care. The problems can be diminished by looking in detail at specific areas of practice, by careful consideration of how questions are asked and by stressing independence and confidentiality.

Deciding what levels of satisfaction are acceptable presents a further difficulty. Smith chose an 80% satisfaction level as the minimum acceptable for the various aspects of his practice studied.[58] This arbitrarily high cut-off point enabled him to define all areas where more than one in five patients were dissatisfied as representing problems which could then be addressed.

In some cases it may be possible to find out about patients' views by studying their behaviour rather than asking questions. For example, Fischbacher and Robertson looked at patients' preference for a particular doctor by recording their requests when booking surgery appointments.[62] Other patient-related aspects of practice may be studied directly. The same study reports a detailed analysis of patients' difficulties in obtaining appointments, which was based on data collected by the receptionists.

Most of the reported studies of patient satisfaction are one-off events involving a fair amount of extra work and perhaps expense. The effort is usually felt to have been worthwhile. However, assessment of patient satisfaction does not yet feature as a regular or routine activity. There is certainly greater potential for patient involvement in the audit activities of general practice, including helping to decide what needs investigating.

■ 5 ■ Service Indicators and the Use of Routinely Available Information

(i) Description of approach

Service indicators, previously called 'performance indicators', were originally developed from data about hospital services that are routinely available nationally. They combine financial information, manpower statistics and measures of clinical activity. Service indicators were intended to be 'a management tool to stimulate debate about the variation in the levels of service productivity across the country and hence direct attention to areas where resources might be deployed to develop new or better services'.[71] Managers receive information that enables them to compare their services with others throughout the country. The emphasis is on identifying outliers — those districts or hospitals with extreme scores.

The Department of Health now produces for FHSAs a parallel set of service indicators covering all the contractor services.[72] The Prescription Pricing Authority (PPA) also sends aggregate PACT (prescribing analysis and cost) data to FHSAs. Comparisons with the national average are included, but not the complete distribution of all FHSAs.

Some health authorities analyse routinely collected information about the activity of clinical firms and feed it back to clinicians. In a similar way, some FHSAs have collated the information they hold about GPs and their practices to create indicators that can be fed back to GPs (see Case study 5a).

(ii) Scope

What aspects of practice may be studied ?

Service indicators for general medical services issued by the Department of Health are based on information from FHSAs about expenditure; list size; characteristics of GPs and practices; employment of ancillary staff and practice nurses; use of deputising services; item of service claims; and complaints. These indicators enable comparisons to be made between FHSAs, but not between practices or individual GPs.

The only information all FHSAs currently provide routinely to GPs each quarter is an update of their registered practice population and a financial statement on the total payments to which practices are entitled based on item of service claims. There are no comparisons with other practices to put these figures into perspective. Some FHSAs provide more detailed information to practices with averages for comparison. This is mainly derived from registration data: list size; age and sex structure of the list population; patient turnover; details of staff employed; and claims for items of service payments (night visits, immunisations, contraceptive advice, IUD insertions, cervical smears, maternity services).

The PPA holds information about prescriptions issued by all GPs. It is collated with the main aim of identifying 'high cost' practices, which used to be visited by regional medical officers (RMOs). FHSAs now have responsibility for advising these practices. Currently every GP is sent a PACT sheet every three months,

giving details of personal and practice prescribing, including numbers and cost of items issued, compared with FHSA and national averages. More detailed reports can be obtained on request. PACT does not provide prescribing rates and repeat prescriptions cannot be identified.

Hospitals potentially hold information about GPs' use of their services but there is currently no requirement to collate and analyse it, for example to show rates of outpatient referrals and use of diagnostic services. Studies of referrals need special arrangements for data collection and analysis and some have shown that it is difficult to identify the GP making the referral as opposed to the practice of origin.[73]

Who is involved ?

Service indicators have been created opportunistically from data about GPs or practices that was originally generated for quite different purposes. FHSAs pass aggregate data to the DoH, which then produces comparative national information. Some FHSAs have analysed the data they hold with help from departments of general practice or public health, and with the approval of the local medical committee (LMC). GPs may have very limited involvement in the process: they generate the original information and may be recipients of unsolicited feedback. Peer group discussion may help GPs make the best use of feedback from FHSAs.[74]

Uses of service indicators

The service indicators provided by the DoH are essentially a tool for comparing and reviewing the performance of FHSAs. The scope for developing service indicators for family practitioner services is currently being investigated by the DoH, 'in order that they should reflect the new policies for FPS ... including the new managerial roles in prospect for FPCs, RHAs and the Department alike'.[72]

The DoH service indicators are of little use for planning and developing local primary care services. For this purpose FHSAs must analyse the information they hold about the structure of general practice and GP activity to show 'the strengths and weaknesses of general practice in an area';[75] to create area profiles;[76] and to help make decisions about priorities for service developments.

The new role for FHSAs in monitoring prescribing and referrals means that they will need to extend their range of indicators. PACT data is now available to FHSAs, and they have taken over the RMO's role of investigating high cost practices. Prescribing indicators are being refined by the Prescribing Unit based in the Department of General Practice at Leeds University, which is also publishing a guide to the use of PACT.[77] FHSAs will have the basis for identifying abnormally high or low referral rates once they begin to analyse information from the annual reports that must be submitted by practices in 1991.

In theory, indicators derived from routinely available data could be used by GPs in the same way as PAA data: allowing GPs or practices to compare their scores with those of colleagues; pointing up progress towards targets or compliance with standards; raising questions about particular aspects of practice; and stimulating further investigation. The indicators are based on information that is universal and should be readily available, although Beardow reported difficulties in obtaining useful data from the Exeter computer system.[76]

(iii) Resources

The agency producing service indicators needs computing facilities and expertise to analyse data and provide feedback to GPs or practices. GPs need to be able to interpret the feedback they receive. However, the onus ought to be on the provider of the indicators to present the data clearly and make interpretation simple.

(iv) Assessment of approach

Indicators derived from routinely available data are valued by some GPs for their objectivity and the opportunity they provide for comparison with the average and range of a large, unselected population. They have the added advantage of requiring neither special collection nor analysis of data.

As with PAA data, extremely low or high scores usually only signal the need for further investigation. Indicators may be difficult to interpret, except where the relationship to quality of care is self-evident, as with immunisation and cervical cytology rates, or where standards and objectives have been agreed in advance. However, in comparison with data generated by PAA schemes, indicators based on routinely collected information have some important additional limitations.

The first is that currently they cover a very small range of practice activities — principally those that attract fees and some aspects of prescribing. Unlike PAA data, they are not tailor-made measures of activity or outcome but are based on what is available, which makes interpretation and comparison difficult.

Secondly, there are concerns about the accuracy of the data on which some indicators are based, especially those derived from information held by FHSAs. GPs' failure to claim fees is a recognised problem, leading to under-estimates of activity in some practices. Perhaps more worrying is the inaccuracy of FHSA population registers, notably in inner cities and other areas where the population is highly mobile.[78] Thus indicators with a population denominator, such as immunisation rates and cervical cytology rates, may also be inaccurate.

Thirdly, GPs may be less receptive to feedback of unsolicited, routine information than to PAA scores in which they have invested their own time and effort. However, Fraser and Gosling found that the majority of GPs read the prescribing information they received, paying particular attention to data on costs.[79] Although only a small proportion used current FHSA returns to assess practice activity, 61% of GPs responding to this survey said they wanted profiles of their practice activity from the FPC (now FHSA). More GPs said they would use this sort of information than would be prepared to collect data themselves for practice activity analysis.[80] The experimental information service described in Case study 5a was welcomed by more than 50% of GPs in an inner London FHSA area, most of whom thought the service should continue.[74]

Fourthly, there is little evidence that indicators provided to GPs stimulate further review or change, especially for practices with scores near the average. The study by Fraser and Gosling indicated that feedback from the PPA had a strong influence on GPs.[79] Forty one per cent of GPs said that prescribing information had altered their prescribing habits. However, 83% of those who said they had not changed were also influenced by the PPA data: the figures indicated to them that their prescribing costs and frequency were about average, so they saw no need to

change. This is one reason why Baker has questioned the value of prescribing information alone. 'The extremes of highly expensive or curiously parsimonious prescribing would be indicators for deeper investigation, but the majority of doctors will not fall into any of these categories. The ability of this approach to discriminate good from less good quality is at best poor.' [30] Feedback of routine data may need to be linked with incentives to carry out audit, opportunities to take part in peer groups, or facilitation programmes.

Some of the most popular subjects for PAA studies have been prescribing, hospital referrals and use of diagnostic services. It is in these aspects of practice that use of routinely available information for comparing performance is likely to increase. If PACT information is enhanced and linked to monitoring use of local formularies, it will be an important tool for audit. The value of PACT information for audit purposes is currently being tested in six FHSA areas.[27] Practice annual reports should provide FHSAs with information about referrals from which they will be able to develop a new range of indicators. However, these may be of more use for auditing the costs incurred by GPs than for measuring quality of care.

Following the lead given by health authorities, FHSAs are likely to make increasing use of service indicators as a management tool — in particular for identifying aspects of the service, practices or GPs that need management attention. The GMSC is concerned that FHSAs and health authorities using service indicators for monitoring may draw 'erroneous conclusions', and has asked LMCs 'to be vigilant in respect of the misuse of information by authorities in management and planning decisions'.[81] Jarman and his colleagues at St Mary's Department of General Practice are currently investigating how well variables derived from routinely available information held by FHSAs correlate with judgements of quality by FHSA staff and the results of detailed clinical audit of GP records. This validation exercise may help FHSAs and others decide how much emphasis they should give to service indicators for quality assurance in general practice.

■ 6 ■ Working in Peer Groups

(i) Description of approach

There are a number of different settings in which GPs may meet to work in small groups. Postgraduate centres with statutory responsibility for continuing education organise local programmes of meetings and other activities. Attendance at these centres has declined in recent years, but the decline is offset by the growing numbers of practice-based and small-group activities taking place under other auspices.[82] These include courses and projects initiated by the RCGP and academic departments of general practice;[29,83] locally organised young principals groups;[84] Balint groups; local medical committee audit groups; and groups organised on the basis of special interests or for the purpose of research. The activities of these different groups reflect their different aims: postgraduate centres tend to emphasise updating and the transmission of new knowledge; young principals groups may be convened primarily to provide mutual support in dealing with the problems faced in practice. Not all groups, therefore, are primarily concerned with peer review. However, growing awareness at national level of the importance of developing performance review as a part of continuing education for general practice is reflected in increasing participation by GP peer groups of every sort in a variety of audit activities.[85,86]

Peer group meetings provide a forum for reviewing the practice of those participating in a number of different ways: through presentation and discussion of selected cases (see Section 2 on case analysis) or the results of audits previously carried out by individual practices (see Section 3 on disease audit); through discussion of PAA-type data (see Section 1 on practice activity analysis) and potentially of routinely available data collated and fed back to the practices by FHSAs (see Section 5 on service indicators). Peer groups may also discuss criteria for good care defined elsewhere, set standards themselves, and collaborate in devising and carrying out audit programmes.

(ii) Scope

What aspects of practice may be studied ?

Group-based peer review may address any aspect of practice which is amenable to investigation through the various approaches described in previous sections and about which information can be presented to the group by means of individual reports, collated data or videotape. The main aspects of practice which are inaccessible — except where the group is practice-based, or employs reciprocal visits of the kind exemplified in the RCGP's 'What Sort of Doctor?' initiative [20] — are those structural, organisational and procedural dimensions which cannot be observed except by visiting the practice (see Section 7).

Who is involved ?

There have been moves towards inviting non-medical members of the primary care team to meetings at postgraduate centres[87] and some practice-based groups include employed and attached practice staff as well as GPs.[85] Irvine et al report on the inclusion of paediatricians in mixed groups with GPs in the Northern

Regional Study of Standards and Performance in General Practice.[88] GPs other than those whose practice is to be scrutinised may be involved in setting up and running projects and courses on group-based peer review.[89,29] Freeling and Burton discuss the use of consultants as outside experts in the setting of standards and defining of protocols.[83] However, membership of the great majority of peer groups involved in standard setting and peer review is confined to the participating GPs. It is generally felt that the participants' knowledge that they are of equal status, share a similar working environment and face similar problems is part of the safeguard which enables them to tolerate and offer the rigorous criticism which will make the group effective.

Uses of working in peer groups

Group peer review provides individual GPs with the opportunity to see how others work, to learn how their own performance is judged by others, and to assess their own strengths and weaknesses in the light of that knowledge. Many of the activities used in group-based peer review — reflection on PAA data, scrutiny of criteria and setting of standards, analysis of cases and audit of particular aspects of care — can also be carried out by individual GPs without direct participation in a group. The use of the group, therefore, is not so much to make those activities possible — although in some cases the opportunity to share out tasks among the group may make a project more practical to undertake — as to enhance their value and effectiveness. GPs who have participated in such groups frequently express confidence that the shared experience of scrutinising their practice has led to changes in their behaviour, but objective evidence for changes in performance and patient outcome is harder to come by and rather more equivocal.

Other wider benefits have been reported by those involved in peer group work which may in the long run be as important for improving patient care as the immediate impact on performance. Grol et al observed that, following involvement in a project on peer review, 'Opposition to peer review largely disappeared, as did feelings of being threatened. The participants reported a greater degree of consciousness about their activities and a more critical approach to their profession. They also had less fear of being criticised and judged.'[89] Reporting on the experience of setting up and being part of a local group, Hull comments: 'We have met some interesting people and done some useful audits of our work, but, most important, I have been made to review what I do, argue my case, and examine my attitudes in the context of a critical but supportive group'.[84] Further benefits identified by Hull include the building of 'important working friendships' and an understanding of group process which 'will be useful elsewhere — in the practice meeting, in the health care team, and working with that most ubiquitous group, the family.'

(iii) Resources

There are two basic resource requirements for the success of any group. First, someone must be able to commit sufficient time and administrative resources to organising meetings and notifying members. The amount of work this involves will obviously depend on the size of the group, the timescale of meetings and the activities planned, but it is never nominal. Second, all members of the group must have enough time and energy to participate in whatever activities they undertake together, both in and out of meetings.

There is debate about whether peer groups function better when there is a clearly defined leader. Freeling and Burton found that led groups were preferred by the GPs in their course;[83] Crombie and Fleming argue that leadership should be shared.[23] Whether or not there is a defined leader, leadership skills and general group work skills may be beneficial to the group. Training in these areas is available on leadership courses for GPs.[82] Beyond this, depending on the purpose of the group, educational resources, research skills and support may also be required.

(iv) Assessment of approach

It has been suggested that peer group work not only offers a useful method of engaging reluctant practitioners in audit activities, but may also enhance the effectiveness of audit in bringing about change.[89] Lawrence describes the value of group resolutions as an incentive to action.[29] Others have commented on the value of group pressure in encouraging compliance with agreed modifications to practice.[83,39]

There is, however, relatively little evidence about the actual effectiveness of group-based peer review in changing performance. The absence of data may reflect a preference by groups to move on continually to new areas of study, and a concomitant resistance to engaging in the repetitive data collection which would be necessary to assess improvement.[83] What evidence does exist suggests that the impact on performance is rather limited. Fleming and Lawrence report dramatic improvement in the rates of carrying out a variety of preventive measures following an audit of practice records carried out as part of a postgraduate course.[49]

Their success, however, appears to be exceptional. Grol et al report changes in performance in a number of areas following an intensive programme of peer review, but acknowledge that these were not substantial and may not be sustained.[89] A study of GPs' prescribing patterns following an intervention which involved regular group discussions of data on individual prescribing behaviour found that changes in prescribing occurred initially but disappeared again within 18 months.[90] Anderson et al describe an audit of digoxin prescribing carried out by a young principals group which resulted in improved record-keeping among those participating in the audit.[91] The results of the audit were discussed with other principals in the participants' practices, but did not influence the practice of these colleagues. The authors conclude that 'audit may change only the auditors'. The implication is that group discussion of audit data is not sufficient to provoke change in the practice of GPs who have not actively chosen to participate.

■ 7 ■ Practice Visiting

(i) Description of approach

Practice visits provide opportunities for observation of many aspects of practice that cannot be directly assessed in other ways. Visits enable the participants to make qualitative as well as quantitative judgements about structural features such as premises, equipment and records. Information about performance may be obtained by sitting in on consultations or practice meetings. Procedures for managing various aspects of practice may be demonstrated. Visitors also gain broader insights and overall impressions of the practice beyond the areas which are explicitly evaluated. As Irvine has said, '... experienced visiting practitioners can and do make judgements about those aspects of general practice which cannot be quantified or measured numerically'.[12]

Practice visits are often used in conjunction with data from other sources such as practice reports, and may include inspection of specially prepared material such as video recordings of consultations. Irvine points out that what happens in a visit will vary substantially according to whether it is perceived by the participants to be voluntary, educational or official.[13]

(ii) Scope

Practice visits are a well established part of the procedure for selecting general practice trainers. In the past, the selection criteria mainly related to structural features of the practice such as premises and equipment, but the emphasis has shifted so that greater attention is now paid to the process of care and the quality of teaching offered. Irvine reports that in the Northern region practice visits are also used to verify compliance with standards previously negotiated with each individual trainer. 'The visiting team examines the buildings, equipment, clinical and other records, and the teaching facilities. The central feature is the interview with the trainer who is asked to explain and elaborate on data previously submitted, to justify his/her performance, and to indicate how the practice is to develop.'[13] Practice visits also form part of a recently introduced procedure for assessing applicants for fellowship of the RCGP.

The 'What Sort of Doctor?' initiative developed by the RCGP in the early 1980s has led to many GPs visiting each others' practices on a voluntary and reciprocal basis for the purpose of assessing their own work.[92] Practice visits take place by invitation and last about a day. Individual performance is assessed in four areas — professional values, accessibility, clinical competence and ability to communicate — for which criteria of good practice have been defined. Acceptable levels of performance are not, however, specified. Assessment is based on observation, discussions with practice staff, inspection of clinical records, a videotape of consultations, an interview with the doctor and a self-completed questionnaire circulated in advance of the visit. This method is also being used by some regions for assessing doctors applying to become trainers.[93]

General practice premises may be inspected by the FHSA when a GP applies to join the medical list, when complaints are made, improvements proposed or grants applied for. The FHSA has certain negative powers to withhold financial support

where provision is found to be unacceptable. Since 1984 FPCs (now FHSAs) have been responsible for establishing a system of routine inspections and visits to all GPs, involving both FHSA members and officers. Some FHSAs have developed this function further by setting local standards, and establishing and helping to finance phased programmes of practice improvement.[94]

In April 1990 FHSAs took over from the Regional Medical Service responsibility for visiting GPs whose drug budgets appear to be excessively high, to find out more about their prescribing patterns. Visits by the FHSA may also become part of the accreditation procedure for GPs wishing to provide minor surgery services.[5] Some MAAG audit teams may choose to visit practices as part of their work.

Besides being used for purposes of professional development, accreditation and control, practice visiting is also valuable as a method of assessing the quality of general practice from the patients' point of view. Inspection by well informed lay people, involving observation and discussion with patients attending surgeries, may lead to suggestions for improvements and identification of problems of which staff were not previously aware. The College of Health is presently undertaking a pilot project with Kensington, Chelsea and Westminster FHSA to develop a package including check-lists, monitoring methods and simple surveys which practices will be able to use to monitor the quality of their service by reference to the experience of their own patients.

(iii) Resources

Practice visits make relatively few demands on the resources of the individual practices visited, beyond the time taken up and the preparation of whatever additional material is wanted for consideration by the assessors, such as a practice profile or video recordings of consultations. The development of assessment procedures and training of assessors may, however, involve a considerable amount of work.

The 'What Sort of Doctor?' scheme was developed by two RCGP working parties and subsequently disseminated through the faculty structure of the college. Study days were held in three pilot facilities, small local groups of GPs received visits from an experienced assessor and the recipients then visited each other. Schofield and Pendleton note, however, that 'some faculties appeared to lack the mechanism for implementing innovations in their areas'.[20] Substantial resources would be needed in terms of time and organisation to make this kind of visiting a widely available option for general practice.

(iv) Assessment of approach

While information about the structural components of care and the amenities provided by a practice might be obtained without a visit, direct observation is essential for assessment of the interpersonal components of care — 'those things outside the consultation that convey a considerate attitude to the patients and are made up of the attitudes of the doctors and their staff, and the arrangements that facilitate communication between patient and doctor'.[38] There are, however, a number of problems with the types of assessment that may be used in a practice visit. Baker has questioned the appropriateness of the interview as a way of

about the way in which behaviour, particularly in consultations, may be affected by the fact of being observed, either directly or by video camera. Finally, there are anxieties about unacceptable invasions of patients' privacy. On the other hand, Baker notes that the inspection of trainers and the 'What Sort of Doctor?' schemes have created a substantial number of doctors skilled at practice inspection, who 'may be able to detect important but concealed problems such as poor relationships among staff members or inefficient practice management'.[38]

To minimise the problems of validity, practice visits are best used in conjunction with information from other sources, such as practice annual reports. If they are to be used to audit performance and promote improvement, visits need to be carried out on a regular basis and assessments must relate to clearly defined criteria. This is already the case in much of the practice assessment which is used in the accreditation of trainers. The 'What Sort of Doctor?' assessment visits are essentially intended 'to refresh, correct and educate' and do not generally take place within a formal scheme of regular evaluation: as reported, they appear to be mostly one-off events. While a visit may provide the stimulus for change, this is not the primary intention of the scheme.

At present, experience of practice review by peers is almost exclusively limited to the minority of GPs who are either members of the RCGP or work in training practices. For the majority, practice visits may be associated primarily with critical inspection by the RMO or FHSA, and may be perceived as threatening rather than helpful.

■ 8 ■ Practice Annual Reports

(i) Description of approach

Some practices have been producing annual reports for years and more have started to do so recently. The RCGP has encouraged doctors to compile information which describes the services they provide and measures their practice activity. Reports are written for different purposes and their contents are variable. In general, however, they contain summary information about the practice and the services it offers, its staff and patients, and some measures of practice activity. Reviews of reports have shown that the majority have so far concentrated on looking back at past activities rather than looking forward and describing plans and aspirations.

It is now a terms of service requirement, in the 1990 contract, that all GPs submit confidential annual reports to the FHSA. However, what is actually specified is an annual return of particular items of data rather than the comprehensive description of the practice and its work that some GPs have been producing.

(ii) Scope

What aspects of practice may be studied ?

Practice annual reports could in theory include information about any aspect of practice. Those analysed in surveys have typically included a mixture of routinely available information (obtained from the FHSA) — list size and structure; provision of contraceptive services; cervical cytology and immunisation rates — and data collected within the practice about the activity of GPs and (sometimes) other team members — workload information (including consultation and visiting rates); appointment system data; referral, investigation and admission rates; and prescribing. Some reports contain information about the health of the practice population, including mortality (numbers and causes of death), morbidity (numbers with diabetes, hypertension, etc.) and risk factors (smoking, obesity). A few practices add to their reports financial information, staff news and reports from attached community health staff. Two recent reviews of practice reports looked for objectives or plans for the future and found, respectively, that these were included in 80% and 50% of reports.[95,96] Wilton also found that few reports drew conclusions or suggested means of improving performance.[96]

The 1990 contract specifies that annual reports must cover at least the following areas: practice staff, premises, policies for effective and economic prescribing, and number of hospital referrals and admissions (by clinical specialty). FHSAs may issue GPs with report forms for completion. They may ask for additional information relevant to the development and monitoring of services locally, but this will not be a terms of service requirement.[97]

Who is involved ?

GPs and practice staff produce the annual report 'in house'. A survey by Wilson et al of 40 practices discovered that in 30 practices a partner had taken responsibility for producing the report; in three the practice manager had had this responsibility; and in seven the responsibility had been shared.[95] FHSAs may help practices by supplying the data they hold in a form that would be suitable for the report.

Uses of practice annual reports

A number of uses of practice annual reports have been described in the literature.

- *Providing information to those outside the practice*
  Audiences may include FHSA, health authority, GP colleagues, other health workers, CHC, patients.[96,98] Reports were circulated very widely by the 40 practices in the survey by Wilson et al.[95]

- *Comparison of activity with other practices*
  Practices may use reports for informal comparison, and this was highlighted as both a benefit and a problem (because of lack of standardisation) by the majority of respondents to the survey by Wilson et al.[95] Nine practices in Scotland produced standardised annual reports with assistance from a department of general practice.[99] Wilton also recommends standardisation of reports, and proposes that local and national variables be included for comparison with practice performance.[96]

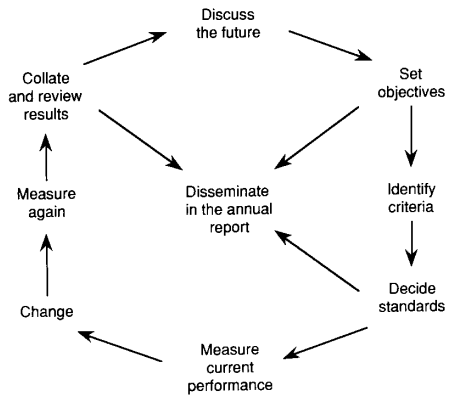
- *Planning practice workload and service developments*
  In the survey by Wilson et al, 80% of the 40 practices said their annual report contained aims and objectives for the subsequent year, and 55% listed planning as one of the benefits of the exercise.[95]

- *Enabling audit*
  The annual report could have a much more central place in running a practice, according to Keeble et al, who see it as 'the hub of objective setting and performance review' (see Figure 2 opposite).[100] Setting objectives and establishing standards are a team activity: 'All staff should meet together, at least annually, to decide upon the objectives to be pursued in the following year and to review progress of the previous year's objectives. Some practices might wish to include interested patients in this process.' The importance of practice annual reports as instruments enabling the practice to manage change is also emphasised by Howarth et al.[99]

- *Communication with patients and increasing patient participation*
  Hart argues that it is impossible in one report to meet the needs of FHSA, colleagues and health authority on the one hand, and patients or local people on the other.[98] He says 'it would be better to produce two reports, a comprehensive one in a fairly traditional style for peer review by medical and nursing colleagues, and a popular version concentrating on one or two key themes for change in the coming year ...' He also argues that 'the logical way to present an annual report to the local population is at or immediately before the annual general meeting open to all registered patients, and the logical way to act on its findings is to use that meeting to elect a patients' committee.' It seems, however, that even the enterprising practices surveyed by Wilson et al did not see patients as a prime audience for their reports.[95] Only 23% displayed a copy in the waiting room and 28% sent a copy to the CHC.

- *Public accountability*
  Like a company annual report, a practice annual report could make public what has been achieved during the year and set out plans for the future.
- *Monitoring by the FHSA*
  The contents of the practice annual report specified in the 1990 contract make it quite clear that GPs are supplying FHSAs with information for monitoring compliance with contractual obligations and controlling costs.

Figure 2. The annual report as the hub of objective setting and performance review



Reference: Keeble B R, Chivers C A, Muir Gray J A, The practice annual report: post mortem or prescription? *Journal of the Royal College of General Practitioners* 1989, **39**, 467–469.

(iii) Resources

The main requirements for producing an annual report seem to be enthusiasm, allocation of time by practice staff and an efficient data collection system. Some skills at data manipulation may also be needed, although Wilton points out that much basic information is already available from other agencies such as the FHSA and PPA.[96] A computerised system is likely to be an important asset, especially for collection of information about consultations, investigations, referrals and admissions. Practices in the survey by Wilson et al were large and had a high level of administrative support (70% were computerised, 90% employed a practice manager).[95] However, they emphasised the amount of time, effort and money that were needed to produce a report, and were worried about the quality of data.

FHSAs are likely to have an important influence on the standard of practice annual reports and the way in which the information they contain is used. They will be able to help practices by feeding back routinely available information; designing easy-to-use report forms; and ensuring that there are agreed definitions of terms such as annual patient turnover rate, consultation rate and prescribing rate. Model reports, for wider audiences, could be constructed to give practices ideas about both style and content.

(iv) Assessment of approach

Practice annual reports have been popular among a minority of doctors as a way of presenting and publicising information about their practice. They can be a vehicle for describing practice activity, reporting the results of audit and setting out plans for the future. They may be used for comparison between practices, especially if the data set is standardised, and this may stimulate further review.

To be of value in relation to audit within practices, reports should spell out aims, objectives and standards and indicate how these will be achieved. Keeble et al have offered an inspiring vision of the practice annual report as 'an integral and dynamic part of the performance review process', linking it with setting objectives and standards by the practice team, collecting information, making changes and monitoring progress.[100] This model overcomes the problem of practices seeing production of an annual report as an end in itself — an additional, time-consuming and costly task of doubtful value.

A different model of the practice annual report is implied by the requirements laid out in the 1990 contract. This specifies an annual return of unrelated items of data, the primary use of which is monitoring by FHSAs, rather than quality assurance, management and planning within the practice. This will provide FHSAs with previously unavailable information about referrals and admissions that may be converted into service indicators (see Section 5). However, these compulsory reports, containing returns which are of little obvious relevance to the practice, may be of doubtful accuracy.

The new contractual requirement to provide confidential information to the FHSA is being seen by many practices as an additional burden. There are no incentives for practices to produce comprehensive annual reports for wider audiences or to make reports an integral and useful part of the audit process.

■ 9 ■ Facilitation

(i) Description of approach

Facilitation in primary care usually refers to someone from outside a practice or area (the facilitator) coming in to help professionals change the way they work and develop services. Facilitators are not necessarily themselves GPs or health professionals. Some are employed specially to do this kind of work. Others 'facilitate' particular aspects of primary care as part of a broader role: for example, a FHSA officer concerned with practice premises or a public health doctor implementing a screening programme. Some specially appointed facilitators operate with a very broad remit: for example, to identify and help to remove constraints on service development in a particular area.[101] Others have a more specific brief: for example, to assist with computerisation of practices,[102] to improve premises,[103] to extend preventive care[104] or to develop diabetic care.[105] The whole range of facilitation in primary care has been analysed by Allsop.[106]

Facilitators achieve their aims by personal contact and persuasion. They visit practices, respond to problems, create networks of interest and provide advice, information and practical assistance. Some facilitators actively promote review or audit of services as part of their job. Others do not get involved in audit directly but may help to establish the conditions in which audit can flourish.

(ii) Scope

The largest single group of specially employed facilitators are 'facilitators for prevention in primary care', who coordinate or develop aspects of population screening, health promotion or the management of chronic illness in primary care. They are usually nurses.[106] Most of these facilitators help practices to set up systems for auditing their performance. Perhaps the best known example is the Oxford Prevention of Heart Disease and Stroke Project.[104] Others have helped practices implement and monitor the use of protocols for the management of chronic illness, particularly diabetes and asthma.

Facilitators for prevention in primary care usually offer a package that involves the whole practice team. They may carry out an initial audit of records to show the current level of performance. They give particular help with organising record systems, identifying cases or at-risk groups, training practice nurses and other staff, and providing equipment. Once the screening system or protocol has been implemented, a further audit shows what improvement has been made.

Facilitators with a more general brief to improve services may stimulate audit by feeding information about performance to GPs, creating networks or peer groups, and making links between hospital consultants and GPs.[106, 107]

(iii) Resources

There are no special requirements for facilitation except that GPs and practice staff accept the need for outside help and cooperate with the facilitator. Part of the process is to build up the necessary infrastructure to support change in the practice. The aim is to get things going and withdraw when a team has the organisation, skills and momentum to continue without further help.

Facilitators are usually employed by health authorities, FHSAs, LMCs or departments of general practice. Practices usually do not have to pay for their time, although the Oxford Rent-an-Audit scheme makes a nominal charge.[44] However, practices must invest sufficient staff time to implement a new scheme or system involving audit. For preventive work or anticipatory care this often means employing a practice nurse and offering special clinic sessions, with the consequent financial costs to the practice.[108] Fullard et al emphasise that these costs are low and the benefits include better practice management, clear division of labour within the practice team, and saving of GPs' time in the long run through training of ancillary staff for greater responsibility.[109]

(iv) Assessment of approach

Facilitation is primarily a method of developing services and encouraging the spread of innovation. Thus it can also be a means of promoting audit. Its strength lies in the flexibility of the approach. Facilitators can generate enthusiasm and boost confidence; demonstrate the value of audit on the spot; involve the whole practice team; and provide whatever help practices need to begin auditing, be it moral support, technical assistance, training or just another pair of hands. Facilitators can use their local knowledge to help connect practices to networks and peer groups that will make audit a wider enterprise. Some facilitators have successfully established joint schemes between general practices and hospital departments that include audit.[107] Facilitators also have the potential to help practices act on the results of audit, especially when the action necessary to improve care involves not only GPs making changes but also other professionals or agencies. Allsop has shown how facilitators have contributed to developing primary care services by working across organisational boundaries and negotiating with decision makers.[106]

In practice, however, facilitators often address only one aspect of the services provided by a practice and are limited to offering an off-the-shelf protocol and promoting audit based on record review, without any peer group involvement. While this may improve certain aspects of patient care, it does not necessarily encourage practices to audit more widely or imaginatively; nor does it ensure that audit results inform primary care service development and planning.

THEMES AND FURTHER QUESTIONS

For this report on the state of the art of general practice audit we reviewed a wide range of literature on quality assessment and service development in primary care. Nine categories of activity involving audit were defined, described and assessed, with the aim of stimulating debate about how general practice audit might be developed further.

A review based only on published literature has obvious limitations. In particular, we have been unable to judge how far published studies give a true reflection of the whole range of general practice audit. In the literature there is a preoccupation with describing current practice and measuring performance. Papers that discuss attempts to tackle problems and find effective ways of changing practice are much more difficult to find. Part of the explanation for this may be that measuring performance is more straightforward than managing change. It may also be easier to write about in the format required by most professional journals.

This bias in the literature is important because of its influence on general practice audit at large, since it promotes a particular view of what constitutes audit. There is an emphasis on data gathering and interpretation rather than on implementing and monitoring change. There is a premium on novelty rather than on repeating work already done by others and reported elsewhere. More attention is paid to details of methodology than to drawing out practical lessons for others. The impression given is that audit is for practices with the skills and resources for research projects rather than for the average practice wanting to solve day-to-day problems. This undoubtedly intimidates some GPs and determines the kind of audit undertaken by others.

There is a danger that this report, because of its reliance on published material, will reinforce these biases. We hope that it will stimulate ideas and encourage critical assessment of approaches to audit, but not set unrealistic expectations about what can be achieved by the majority. Those promoting audit locally need to emphasise that audit is about making changes as much as about collecting data, and that modest studies which repeat good work done elsewhere may improve patient care more efficiently and effectively than attempts to be original. There are signs that the literature is changing in ways that will help to promote this. The new, regular series in the *British Medical Journal* — 'Audit in practice' — was introduced by a leader emphasising the practical application of medical audit. One of the criteria for selecting articles for publication is that they discuss the action taken to improve care and 'close the feedback loop'.[10] Practical guidance on how to carry out audit in general practice is also beginning to appear. For example, the introductory guide by Baker and Presley offers an audit plan for the primary care team to follow.[21]

In this report we have attempted to chart the territory of general practice audit. The audit activities we have assessed in the previous sections would be difficult to summarise in a few short paragraphs. Therefore we conclude by exploring briefly how they contribute to the stages of the audit cycle, expressed simply as describing practice, setting standards, and introducing and monitoring changes. Finally, we return to the policy context in which general practice audit is being developed and raise some questions that will need to be considered if audit is to spread and progress.

Describing practice

Much of the work reviewed in this report goes no further than describing or measuring aspects of general practice. Practice activity analysis (PAA) was developed as an efficient method for GPs to categorise and quantify their activities. It has proved a non-threatening and popular way for GPs to break into the audit cycle. However, because aggregate data are used for comparison between colleagues and with group norms, PAA usually raises more questions about why differences exist and what can be done to improve care than it is able to answer. Indeed, emphasising comparison with colleagues may detract from establishing standards or criteria for high quality care.

Service indicators, derived from routinely collected information about general practice, also place the emphasis on comparing practices and identifying deviations from the norm. The few indicators with a clear relationship to quality, such as immunisation rates, are of undoubted value to practices if they are timely and accurate. Unfortunately the majority of indicators currently available are of little relevance to practices assessing quality of care.

In contrast to PAA and service indicators, case analysis is a much more adaptable method of investigating quality of care. Almost any aspect of practice may be studied in as much detail as is required to identify deficiencies and to specify improvements that may be needed. Case analysis is often used simply as a way of finding out what is going on in practice. However, since case analysis can clarify the need for protocols and standards and provide the information necessary to define them, it may also provide the impetus for going on to further stages of the audit cycle.

Setting standards

The setting of standards and definition of protocols may be useful for a variety of different purposes, including clarifying objectives and helping to specify the allocation of tasks within the practice team. The role of standards and protocols in the audit cycle is to act as a gauge against which practice can be measured and performance judged. Audits of disease or process provide the data for carrying out such assessments and can also act as a check on the feasibility and appropriateness of protocols.

Practice annual reports could be a vehicle for both stating the standards that have been set by the practice and reporting the results of audits that check whether the standards have been achieved. However, very few practices yet see reports as part of the audit process, and this is unlikely to change until audit becomes more widespread and practices gain the confidence to publicise their quality assurance activities.

Introducing and monitoring change

'... The essence of audit is that it should be designed to achieve change'.[10] Once alterations have been introduced the audit must be repeated to ensure that change has occurred in the right direction. 'Without this 'closing of the feedback loop' audit may be little more than a pious exercise in self-congratulation.'[10]

Disease and process audit offers a model that incorporates continuous monitoring of performance and adjustments to practice to improve outcome. However, most published examples are before-and-after accounts of the implementation of a protocol. Some of these studies show dramatic improvements in performance in the short term, but we know little about what happens to both system and performance when the novelty wears off. Practice teams are only human, and we might guess that as interest wanes performance will deteriorate.

As protocols are adopted for more aspects of care an important question will be how to sustain interest in continuous review and adjustment of systems. There is some evidence that combining audit with the personal contact provided by working in peer groups, visits from colleagues or help from facilitators can stimulate changes in practice. It remains to be seen how support of this kind can best be used to maintain improvements and bolster the momentum for audit on a long term basis.

The ultimate goal of the audit cycle must be the achievement of improvements in patient care. The majority of audit initiatives make implicit assumptions about the potential benefits to patients, but the effects on patients are rarely so obvious that the benefits can be taken for granted. Direct evidence about the impact of audit on patient care is hard to find. Studies which concentrate on seeking patients' views offer some insights into the patients' experience, but both methods used and topics studied are limited in scope, and few such studies aim to do more than gather information.

Taking audit further

This review raises a number of issues relevant to current government proposals for extending and coordinating medical audit in general practice. When making plans for developing audit, FHSAs and their MAAGs will need to consider the potential contribution to be made by all the different types of activity described in this report. The strengths and limitations of the approaches have been assessed in ways that we hope will help MAAGs set realistic goals and select the most effective means of achieving them. The review suggests that it will be important to:

- encourage diversity in general practice audit
- promote approaches to audit that are appropriate to the needs and resources of practices in the area
- build active local networks that include all those who can offer GPs practical help with audit and improving service quality

MAAGs will need to consider how they can support GPs who have already embarked on audit and how to motivate those who have not yet begun. Those who have started to audit may need help to follow through from measurement and comparison of performance to making and evaluating changes in practice. GPs who have experience of successfully completing the audit cycle are likely to be valuable local sources of expertise and may be able to offer leadership to colleagues, perhaps as members of MAAGs or audit teams.

All practices will find it easier to carry out effective audit if resources are made available to build up the necessary infrastructure: for example, to improve record-keeping; to computerise practice information and management systems; to train

sufficient practice staff; to provide more accurate, timely and useful comparative information about practice activity; and to help with the design of studies, data analysis and implementation of change.

Of equal importance are organisational structures that promote and sustain audit. Only exceptionally highly motivated GPs are likely to begin and continue audit in isolation. The personal contact provided by working in peer groups, practice visits and facilitation seems to be a key ingredient in stimulating interest and gaining commitment to participation in audit, as well as a useful means of passing on lessons from experience and building up expertise. The review suggests that these methods ought to be a central part of any strategy to develop general practice audit.

The opportunities for cooperation between GPs and others involved in evaluating and developing primary care services are undoubtedly greater than demonstrated by this review. Various approaches to improving service quality are being developed by other health professionals and managers, but so far there have been few links established between these activities and general practice audit. Initiatives which break down the barriers and emphasise the potential for collaboration in the development of services should be encouraged.

The potential for patients becoming actively involved in general practice audit is also substantially greater than shown here. All too often patients are used as just another source of information. If patients participate in identifying problems, setting standards and assessing practice, there is a far greater chance that audit will result in real improvements in patient care. Priority should be given to developing truly patient-centred audit.

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APPENDIX

Case Studies

Practice activity analysis

Case study 1a PAA in Brent and Harrow

Case study 1b The South East Thames Experiment

Case analysis

Case study 2a Heartsink patients

Case study 2b Improving referrals to hospital outpatient departments

Case study 2c Lessons from an audit of unplanned pregnancies

Disease and process audit

Case study 3a Audit of support given to lay carers of demented elderly people by a primary care team

Case study 3b Cervical cytology in the Vale of Trent Faculty of the Royal College of General Practitioners, 1985–8

Seeking patients' views

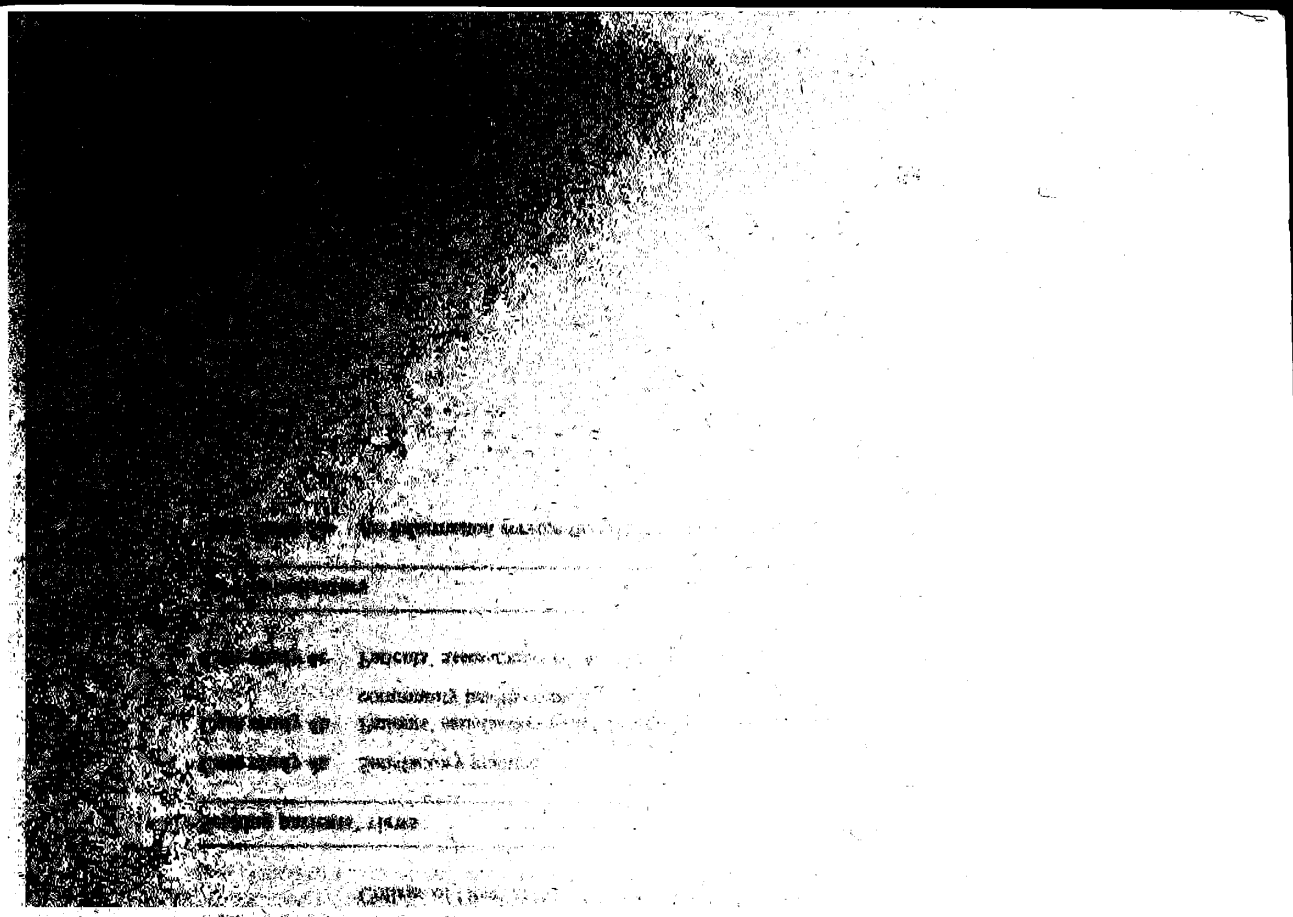
Case study 4a Satisfactory practice

Case study 4b Patients' satisfaction with GP services: a survey by a community health council

Case study 4c Patients' assessments of out of hours care in general practice

Service indicators

Case study 5a An information service for GPs based on claims for fees



Case study 1a
Practice Activity Analysis

PAA in Brent and Harrow

In 1986 Brent and Harrow FPC and LMC set up a local PAA pilot scheme involving eight practices. It was coordinated by the FPC, which gave an assurance that the information would not be used to criticise any doctor whose performance appeared to be significantly different from the norm. The results of the pilot confirmed that a larger scheme would be worthwhile, so all practices in the area were invited to participate in 1987.

The main aim of the scheme was to provide GPs with data for self-analysis and comparison with colleagues. Additional aims were to gather data that would help with planning and developing primary care services in the area.

A seminar was held for interested GPs and eventually 76 GPs (20% of the GPs in the area) took part, collecting data on aspects of their own work and that of practice nurses for one month. The emphasis was on describing 'workload': numbers and types of consultations, items of service, home visits, referrals and investigations. The data were analysed by the FPC and each GP was given his or her own analysis, the practice mean and the mean for all participating practices. The most striking feature of the results was the large variation in activity.

Two seminars were held at which the results were discussed. 'It was evident that there was an enthusiasm to compare activity and many practices found that the information was of value and that it led to alterations in their organisation.'

Reference

Peter L, Tate J B, Catchpole P J, Practice activity analysis: collaboration between general practitioners and a family practitioner committee. *Journal of the Royal College of General Practitioners* 1989, **39**, 297–299.

Case study 1b
Practice Activity Analysis

The South East Thames Experiment

In 1980–81 the South East Thames Faculty of the Royal College of General Practitioners carried out an experiment to evaluate practice activity analysis used by doctors in small audit groups. Ten groups with 6–15 members were recruited by the GPs who were to act as tutors. Five PAA studies were undertaken: choice of chemotherapy, investigation rates, psychotropic drug prescribing, referrals to specialists, and visiting profiles. The groups were randomly allocated varying levels of involvement in each: recording data only; recording plus receiving feedback; and recording, feedback plus peer group discussion.

The data for most of the studies required two weeks recording; 746 data sheets were analysed. Participants were asked to repeat recording one year later and the two sets of results were compared.

The experiment showed that it was not difficult to recruit interested doctors into groups for self-evaluation. A great deal was learned about the process of running self-evaluation peer groups and their information requirements. Feedback was initially excessive and had to be simplified.

No evidence of change in group performance was found between the two years. There were one or two minor changes, but these could not be related to any particular level of involvement in the experiment. Unfortunately, the experiment was not designed to look at individual change, so it is not known how participation in the experiment influenced the behaviour of individual GPs.

Reference

Crombie D L, Fleming D M, *Practice activity analysis*. London: Royal College of General Practitioners, Occasional Paper 41, 1988.

Case study 2a
Case Analysis

Heartsink patients

The NHS practice of a university medical school decided to investigate the problem of 'heartsink' patients — those who evoke in the doctors or practice staff 'an overwhelming mixture of exasperation, defeat, and sometimes plain dislike that causes the heart to sink when they consult'. The practice team identified 28 heartsink patients and the nine 'most heartsink' were selected for discussion at a series of lunchtime meetings. A management plan was formulated as a result of the discussion about each patient and entered into the notes. The other 19 heartsink patients were not discussed and their care remained reactive and unplanned. Five years later another list of heartsink patients was compiled and compared with the earlier one.

The heartsink patients often had serious medical problems, but they were otherwise a disparate group whose only common thread appeared to be the distress they caused to their doctor and the practice.

Five years later the heartsink list was shorter, containing only 19 patients, including seven from the original list: six who had not been discussed and one who had. (Four from each group had left the practice.) The authors felt that this represented a genuine improvement, inasmuch as the group originally discussed had included the worst cases. The process of getting more information about the patients seemed to make them less heartsink, and the formulation of a management plan made the doctor/patient relationship more positive.

This small-scale study was based on highly subjective measures and there was no statistical confirmation of the improvement noted. However, the problem studied was a subjective response rather than a measurable characteristic of the patients. By the same token, feeling less heartsink after five years was a valid benefit, irrespective of whether any characteristics of patient or doctor had actually changed.

Reference

O'Dowd T C, Five years of heartsink patients in general practice. *British Medical Journal* 1988, **297**, 528–530.

Case study 2b
Case Analysis

Improving referrals to hospital outpatient departments

A one-year prospective audit was carried out to determine the appropriateness of referrals from a six-handed group practice in a southern coastal town to hospital outpatient departments. Information on the outcome of all referrals was sought, including the investigations carried out by the consultant that led to a diagnosis, the diagnosis reached, and the management.

Of roughly 3,000 patients referred during the year, 277 with various skin and soft tissue disorders could probably have been managed solely by the GPs. Referrals for cryotherapy and diabetes could also probably have been avoided by specialist training of the GP. In cases of haematuria and prostatic hypertrophy substantial time could have been saved for both the patient and consultant had the GP supplied the results of relevant investigations.

The study incurred considerable costs in GPs' time, secretarial support and money. The computing equipment and software alone accounted for much of a £12,000 grant. The rewards, however, were regarded as substantial not only in identifying some deficiencies in the GPs' referral behaviour, but also in confirming the appropriateness of the majority of referrals that were made. The study did not address the possibility of under-referral.

There were several practical outcomes of the project. Within the practice a session for minor surgery was introduced, which was subsequently to be extended to include cryotherapy. Several conditions were identified for which the GPs wanted to increase their management skills. The authors also produced a handbook for all GPs in the health authority containing a distillation of their discussions with the local consultants and offering guidelines on efficient referring.

Reference

Emmanuel J, Walter N, Referrals from general practice to hospital outpatient departments: A strategy for improvement. *British Medical Journal* 1989, **299**, 722–724.

Case study 2c
Case Analysis

Lessons from an audit of unplanned pregnancies

A seven-handed practice in a new town undertook a two-year prospective study of all women newly reporting pregnancy. The aim was to improve family planning by studying the methods of contraception used by women with unplanned pregnancies. To relate this to women in the practice as a whole, 1442 women aged 15–44 who consecutively attended the surgery for reasons other than pregnancy over a four-month period were also asked for details of their contraceptive use.

Of the 518 pregnancies reported, 36% were unplanned. Unplanned pregnancies were most common in women aged 15–19, of whom over half used either no contraceptive or extremely unreliable methods. Younger women who used effective means of contraception used them less reliably than women aged 25 or over. The most common reasons for not using combined oral contraceptives were fear of the side effects or actual side effects. Twenty women were not using the combined pill because they had received inappropriate medical advice.

The study was carried out with substantial cooperation from other members of the health care team, but there is no mention of external resources except encouragement and some statistical advice. Some specific practical recommendations to minimise unplanned pregnancies are made, but the paper does not say who, other than GPs, should implement them. If the recommendations were put into practice, a further audit could be undertaken to assess their impact.

Reference

Metson D, Lessons from an audit of unplanned pregnancies. *British Medical Journal* 1988, **297**, 904–906.

Case study 3a
Disease and Process Audit

Audit of support given to lay carers of demented elderly people by a primary care team

A general practice in Scotland undertook a formal internal audit to determine how well a primary care team supported lay carers of demented elderly people. The following standards were set: (1) primary care teams should know of the existence of symptomatic demented elderly patients in the community; (2) lay carers should be knowledgeable about dementia; and (3) the resources which the lay carers felt they needed should be supplied unless they were unavailable.

An attempt was made to identify all symptomatic demented patients over the age of 75 years in the practice. Twenty-two demented patients were identified from a practice population of 534 elderly patients living at home. Three demented elderly patients had no lay carer so 19 patients and their lay carers were entered in the study.

The lay carers were interviewed by a trainee GP and a health visitor using structured questionnaires covering (a) carers' knowledge about dementia, and (b) the extent to which patients and carers received, or would like to receive, 17 different resources available to demented elderly people and their lay carers. The carers were also asked to complete a stress questionnaire. The research team issued the carers with a booklet about dementia and informed the primary care team of the resources the carers would like to receive. Repeat interviews were carried out six weeks later using the same questionnaires.

The first of the three standards for primary care support was met as all, or nearly all, demented elderly patients identified in the practice during the audit were already known to the primary care team. Before the intervention, the primary care team failed to meet the second standard, in that the lay carers were not knowledgeable about dementia. There was an increase in knowledge following the intervention, which was felt to represent a genuine improvement and not simply a learning effect from the questionnaire. Before the intervention, the primary care team also failed to meet the third standard, in that carers' needs were not being met despite the availability of resources. Following the intervention, there was little change in the use of resources by lay carers, but a considerable reduction in the number of resources they felt they wanted and thus an overall reduction in unmet need. There was a reduction in mean stress scores for the 12 carers who returned stress questionnaires.

The authors conclude that 'the positive outcomes for lay carers demonstrate that intervention is worth while especially as there was no increase in the overall use of resources'.

Reference

Philp I, Young J, Audit of support given to lay carers of the demented elderly by a primary care team. *Journal of the Royal College of General Practitioners* 1988, **38**, 153–155.

Case study 3b
Disease and Process Audit

Cervical cytology in the Vale of Trent Faculty of the Royal College of General Practitioners, 1985–8

Members of the Vale of Trent Faculty of the RCGP were invited to audit the organisation and performance of their cervical cytology programmes. The audit was repeated three years later. The aim of these audits was to detect any features of the programmes associated with high performance and to report changes over the three years. The educational aim of the exercise was to stimulate interest and activity in cervical screening and to encourage practices to look at their own performance in more detail.

Retrospective audits were completed in 1985 and 1988 on separate sequential samples of 100 records of women aged 35–64 from each of the participating practices. (76 practices participated in the first audit and 55 in the second.) Participants were asked on both occasions about their policy on cervical smears.

The performance measures were the number of women in each practice who had no record of a smear and the number who had had a smear in the previous five years. After the first audit, participating practices were sent their own results, aggregate results of the audit, and their order in the rank.

The median percentage of women having had a smear within the previous five years was 49% at the first audit and 69% at the second. The median percentage of women with no record of a smear was 28% at the first audit and 16% at the second. All but six practices showed an increased performance on both measures at the second audit. Within each audit, the presence of an active call system was the only organisational variable associated with better performance.

The study disclosed substantial changes in practice policies and organisation regarding cervical cytology between 1985 and 1988 in many practices. In the second audit there was more agreement among practices, and this consensus was close to the policy of the district health authority. The authors comment that 'without a control group of practices it is impossible to say whether the pronounced improvement was a result of taking part in the first audit or a reflection of more widespread changes in general practice'. They suggest that changes in general practice are the more likely explanation, given the evidence from elsewhere that audit has only limited impact on GPs who have not directly participated in organising it.

Reference

Wilson A, Cervical cytology in the Vale of Trent Faculty of the Royal College of General Practitioners, 1985–8. *British Medical Journal* 1990, **300**, 376–378.

Case study 4a
Seeking Patients' Views

Satisfactory practice

A group practice with six principals wished to assess consumer satisfaction with the service it provides. A sample of 48 patients attending the practice were selected opportunistically to reflect the age and sex distribution of the GPs' list. Patients were interviewed in a private room by specially trained independent interviewers using an inquiry method known as 'critical incident technique' (CIT), which allows subjects to talk freely about the events they consider important. Confidentiality of information was assured.

The incidents identified by patients were subsequently grouped by the aspect of care to which they related, such as making appointments, diagnostic tests, car park, etc. The results were presented as an inventory of events demonstrating patients' opinions of the service.

Specific points in the results were discussed at practice meetings. The dissatisfaction of patients wanting to change doctors and those who disliked having trainees present during consultation came as a surprise to the partners. These issues are being kept under review for solution in the longer term. In the mean time, points raised by the study are either being resolved or are under active consideration.

The authors comment that CIT provides a relatively inexpensive way of finding out what patients like and dislike about the service they are getting, and produces results of immediate practical value. They claim that the information provided by the method covers what practices would need to know to retain the estimated 20% of their existing patients who might otherwise move, and to attract new patients.

Reference

Gau D, Pryce Jones M, Tippins D, Satisfactory practice. *Health Service Journal* 1989, 30 November, 1464–1465.

Case study 4b
Seeking Patients' Views

Patients' satisfaction with GP services: a survey by a community health council

Brighton CHC was asked by five GPs from four local group practices to undertake a patient satisfaction survey of their practices. The study was designed as a complementary exercise to the RCGP's 'What Sort of Doctor?' initiative, which had been criticised for omitting a patient perspective. One hundred and seventy seven mothers with children under five were interviewed at home. This category of patients was chosen on the grounds that they make frequent use of the services provided by the GP and primary health care team. The study was carried out by independent interviewers from the CHC using a semi-structured interview.

There were problems with contacting some mothers because of the high mobility of young families and the fact that the data on the child health computer was not up to date.

Results showed that mothers' main concerns were with the interpersonal skills of the doctor, and especially with the relationship established in the consultation. Overall levels of satisfaction were high, but detailed questioning revealed criticisms about certain aspects of service provision from a minority of mothers. A common theme was the failure of professionals to take seriously anxieties about the apparent vulnerability of babies and young children. Some mothers felt actively discouraged from requesting home visits and others were actually refused them. Dissatisfaction with information concerning diagnosis and treatment suggests that anxieties were not allayed by visits to the surgery.

In spite of its limitations, the study fulfilled its primary function of providing useful patient feedback to the practices involved, and identified some particular areas of service provision that might benefit from closer scrutiny. The report does not say whether any changes were made as a result.

Reference

Williamson V, Patients' satisfaction with general practitioner services: a survey by a community health council. *Journal of the Royal College of General Practitioners* 1989, **39**, 452–455.

Case study 4c
Seeking Patients' Views

Patients' assessments of out of hours care in general practice

Patients and GPs regard out of hours care as an important indicator of the standard of care provided by a practice. A university department of primary care undertook a study to ascertain patients' views about recent experiences of out of hours care; to assess whether the needs of patients of all ages were being equally well met; and to examine the acceptability of different types of out of hours consultations.

Fifty nine principals and 18 GP trainees from 13 North London teaching practices participated in the study. Each practice recorded all out of hours calls received from patients over a four-week period on a specially designed card. A stratified sample of 177 of those patients were subsequently interviewed at home by three trained interviewers using a semi-structured schedule developed through exploratory interviews with patients.

Results showed that parents seeking consultations for children were least satisfied with the consultation; those aged over 60 responded most positively. Visits from GPs were more acceptable than visits from deputising doctors for patients aged under 60; older patients were equally satisfied with either.

The authors concluded that practices need to review management of out of hours calls on a regular basis, particularly in relation to calls concerning children, where conflict or misunderstanding seem most likely to occur. They suggest that doctors may under-estimate the need to take account of the high anxiety generated by acute illnesses and to help patients and parents 'make sense' of the illness through exchange of ideas and information about cause and prognosis. The report also contains suggestions for helping patients decide whether an out of hours call is appropriate, and for reducing the number of such calls through improving access to the doctor during surgery hours.

Reference

Bollam M J, McCarthy M, Modell M, Patients' assessments of out of hours care in general practice. *British Medical Journal* 1988, **296**, 829–832.

Case study 5a
Service Indicators

An information service for GPs based on claims for fees

Data held by Kensington, Chelsea and Westminster FPC for the purpose of paying GPs' capitation and item of service fees were analysed every quarter for a year to provide an information service for GPs in the area. The experimental service was provided by the Department of General Practice, with permission from the LMC and the cooperation of the FPC, at no cost to the FPC or local GPs. Each practice received a quarterly print-out showing the age structure of its population, the numbers of new registrations and removals, and data about items of service (contraceptive advice, IUDs, cervical smears, maternity services). These were expressed as rates which could be compared with averages for the area and with the highest and lowest rates found in individual practices.

The data were kept confidential — the only print-outs were those sent to practices. A brief questionnaire was attached to the print-out for the final quarter and 55% of practices responded. Nearly all thought the information was interesting; about 60% found it useful either for practice organisation or financial reasons; and 82% thought the service should continue. However neither the FPC nor the LMC had funds to continue the service.

The authors would have liked to improve presentation of the data, using graphics which showed the percentages of practices falling into different ranges, so that GPs could see more clearly how they stood in relation to their colleagues. It is not known whether the feedback stimulated any changes in the policies or organisation of practices.

Reference

Harris C M, Hanson F, Family practitioner committee records — A neglected resource. 1. An information service for general practitioners based on claims for fees. *Journal of the Royal College of General Practitioners* 1986, **36**, 111–113.

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