Survey of general practice audit in Leeds

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Abstract

Objective—To determine general practitioners' attitudes to medical audit and to establish what initiatives are already being undertaken; to define future ideas for audit and perceived difficulties in implementing audit in primary care.

Design—Analysis of responses to a self administered postal questionnaire.

Setting—Urban conurbation with a population of about 750 000.

Participants—386 general practitioners on the general medical list of Leeds Family Practitioner Committee.

Main outcome measures—Extent of recording of practice activity data and outcome measures and clinical data, use of data, and audit performed; ideas for audit and perceived difficulties.

Results—317 doctors responded to the questionnaire (individual response rate 82%) from 121 practices (practice response rate 88%). In all, 206 doctors thought that audit could improve the quality of care; 292 collected practice activity data, though 143 of them did not use it. A total of 111 doctors recorded some outcome measures, though half of them did not use them. Varying proportions of doctors had registers for various diseases (136 had at least one register), disease management policies (60 doctors), and prescribing policies. In all, 184 doctors met monthly with other members of the primary health care team.

Conclusions—Much poorly focused data collection is taking place. Some doctors have experience in setting up basic information systems and practice policies, and some audit is being performed. The family health services authorities need to take seriously the perceived difficulties of time, organisation, and resources concerned with audit.

Introduction

In the white paper *Working for Patients* the government expressed its desire to see a comprehensive system of medical audit covering all general practices within three years.¹ Contrary to popular belief, the idea of medical audit is not new to general practice. In 1983 the Royal College of General Practitioners launched its quality initiative,² and policy statements followed.³ There has been a plethora of articles propounding the benefits and difficulties of audit in general practice, yet no clear picture has emerged either of general practitioners' attitudes to audit or of its prevalence.^{4,7}

In 1989 a subcommittee of the Leeds Local Medical Committee was convened to promote medical audit in general practice. We carried out this study in conjunction with the subcommittee to achieve the following objectives: (1) To ascertain the attitude of general practitioners to medical audit. (2) To describe what medical audit has been undertaken by them. (3) To define what audit activities general practitioners would

like to introduce and what difficulties they perceive in doing so.

Method

In February 1990 a self administered questionnaire was sent to all general practitioners in Leeds. Non-respondents were contacted once by telephone. Results were analysed by using the statistical package for the social sciences (SPSSX).

Results

In all, 386 questionnaires were sent out and 317 were returned from 121 of 138 practices (individual response rate 82%, practice response rate 88%). There was no difference in the results from individual doctors and practices. The following results are based on individual replies.

Attitude to audit—In all, 206 of the 317 doctors thought that medical audit would be a good way of improving the quality of care given to their patients, 32 thought that audit would not benefit patient care, and 79 did not know.

Information systems—A total of 273 doctors had an age and sex register and 155 had a computer.

Practice activity data—A wide range and variety of data collection was reported (table I). In all, 159 doctors were using these data in some way; 54 were making some kind of comparison within the practice, with other practices, or with nationally available data; and 51 were using the data in planning service delivery.

TABLE I—Data collection concerning practice activities by 317 general practitioners in Leeds

Subject	No of doctors
Home visits	292
Consultations	282
Patients joining or leaving practice	253
Practice nurse consultations	238
Outpatient referrals	225
Other statistics	120
Investigations	101
Emergency admissions	95
Pregnancy outcome	79
Mortality	111

Clinical information and disease registers—Data on mortality were collected by 111 of the doctors and data on outcome of pregnancy by 79. One hundred and thirty six doctors kept a register for at least one disease; table II gives details of disease registers. A further 16 doctors considered that they had registers for all disorders by virtue of having the data entered on a computer. Seventy three were using these data, most commonly to plan various clinics.

Disease management policies—Sixty three doctors had at least one disease management policy. The commonest were for leg ulcers (35), asthma (22), and diabetes (13).

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TABLE II—Number of general practitioners in Leeds (n=317) with a disease register for specific diseases

Disease	No
Diabetes	108
Hypertension	70
Asthma	67
Epilepsy	38
Cardiovascular disease	32
Endocrine disease	25

Prescribing policies—In all, 105 doctors had a prescribing policy of some type. Fifty one had policies which covered all drugs; the remainder had policies for specific groups of drugs, predominantly benzodiazepines, antibiotics, and antihypertensive drugs.

Contact with colleagues—A total of 184 doctors met at least monthly with their partners and other practice staff. Twenty two met at least monthly with partners from other practices.

Medical audits undertaken—Fifty seven doctors had already been concerned in some form of audit activity in their practice; the box lists these activities.

Audit activities undertaken by 57 (18%) of Leeds general practitioners

Clinical

Oxford heart and stroke study type audit (2)
Hypertension (2)
Hypertensive drugs or β blockers
Congenital heart disease or pulmonary vascular disease in 18-70 year olds (2)
Anaemia in ethnic minorities
Thyroid function tests in patients receiving thyroxine
Diabetes
Minor operations
Diagnosis of depression
Outcome of discharge from mental institutions
Epilepsy
Myxoedema

Investigations and referrals

Investigations and referrals (3)
Use of laboratory facilities

Prescribing

Prescribing analysis and costs (PACT) state (6)
Repeat prescriptions (2)
Benzodiazepine prescribing (2)
Long term medication
Contraceptive pill survey—21 year audit
Morbidity registers in relation to drug bills
Other (2)

Prevention

Vaccinations and immunisations (11)
Cervical cytology (9)
Developing a register for immunisations and cytology
Annual health check (3)
Family planning
Intrauterine contraceptive device study
Well person screening
Opportunistic recording of health promotion data (2)
Breast feeding rates
Visits to elderly and chronically ill (4)
Screening of elderly (6)
Screening of men >60 for urological disease and raised blood pressure (2)
Urine testing in men >55 years

Consumer

Patient surveys (7)
Patient opinion on consultation times and appointments
Patient opinion on surgery efficiency
Use of practice patient library

Organisational

Consultation patterns: parents about children
Practice nurse activity
Geographical review of the practice
Monthly check on out of hours calls
Number of patients by address
Consultations by age/sex/problem
Availability of appointments
Length and frequency of consultations
Missed appointments survey
Disposal of patients

Ideas for future audit—In all, 124 doctors gave ideas for future audit (box on following page).

Expected difficulties in performing audit—A total of 171 doctors expressed concern over possible difficulties in performing audit. One hundred and eleven thought the time necessary to carry out audit was likely to be a problem. Sixty nine doctors quoted factors of an organisational nature, such as the size of the task, amount of paperwork concerned, knowing how to do it (particularly preparing protocols and analysing results), knowing where to start and how to achieve the best results, the logistics of collecting data, and, finally, getting information from other professionals (for example, staff in accident and emergency departments). Fifty four doctors mentioned difficulties in relation to resources required to carry out audit. These included problems relating to use of computers in audit and also the need to take on more staff for audit or to train existing staff.

Discussion

The government has decreed that general practitioners be engaged in regular audit by 1992. As much thinking about audit remains ill focused and vague⁸ it is important to define the present state of audit in general practice and see how it compares with generally agreed basic principles.⁹ Our survey shows that there is experience of auditing in general practice and also expertise in drawing up disease registers, disease management policies, and prescribing policies. Many general practitioners thus already have entry points for starting the process of setting standards for the measurement of clinical outcome. Most audit that has been undertaken has used data previously defined as essential for primary care audit.¹⁰ Many general practitioners seem, therefore, already to be undertaking the sort of audit that theorists will find acceptable.

We consider three conditions essential for audit to be successful: data must be collected; there must be the opportunity to collate, analyse, and compare these data; and there must be a forum for discussing the findings and implications of the exercise. The 14% of doctors working in practices without age and sex registers, which are thought to be essential for audit,¹¹ will find audit activities difficult to organise. Many of these doctors were working in practices without computers or thought, for some other reason, that staffing implications would deter them from performing audit. These organisational difficulties surrounding data collection and audit must be considered.

Much data collection seems to have been haphazard, and little use has been made of the potential opportunities for audit, as shown by the 47% of doctors who do nothing at present with collected data. Most of the present audits were also a single analysis of an aspect of practice activity, a finding consistent with that of a review article by Hughes and Humphrey.¹² There was little evidence of repeated audits that will "close the feedback loop"⁸ and make audit a real tool for change.

The same comment can be justly made about our study. This "audit of audit" is a description of baseline audit activity. We hope and expect that such activity will increase in the future and intend to repeat our examination of audit after two to three years.

In their paper on practice activity analysis Crombie and Fleming rightly emphasise that audit should be the discussion of measured performance rather than of opinions and ideas.¹³ This measured performance should be exposed to the rigours of a small informed peer group. Regular contact with colleagues is thus an essential part of audit based on peer review. At present meetings among practices would seem to be in their infancy, and many doctors did not seem to be having frequent meetings, even within their own practice.

Suggestions for future audit among 317 Leeds general practitioners

Clinical

Disease registers (16)
Diabetes (13)
Morbidity/mortality data (13)
Disease management policies (10)
Hypertension/heart disease (8)
Asthma (7)
Mortality/morbidity from respiratory disease (2)
Mortality from cardiovascular disease
Pregnancy—high risk factors/outcomes (2)
Emergency admissions
Outcome audit (angina, upper respiratory tract infection, headache)
Management of thyroid disorder
Comparative study of morbidity in two surgeries
Minor surgery
Cancer management—outcome and delay
Treatment for hyperlipidaemia
Cost of keeping mentally ill and elderly in the community
Morbidity in young people of working age
Management of minor illness
Risk factors for osteoporosis with a view to starting a hormone replacement therapy clinic
Association of urinary tract infection in pregnancy with raised blood pressure in middle age
Identification of alcohol problems/evaluation of the effect of advice
Hormone replacement therapy in the older woman
Termination of pregnancy—could we have intervened earlier with contraceptive advice?
Counselling—does it work?
Chronic disease prevention and outcome
Quality of care of the elderly
Changing morbidity patterns
Maternity

Investigations and referrals

Hospital referrals (18)
Investigations (3)
Hospital treatment

Prescribing

Prescribing/repeat prescribing/prescribing policies (20)
Drug cost analysis (2)

Prevention

Cervical cytology (12)
Immunisations (12)
Evaluation of screening procedures (new contract) (12)

Consumer

Patient satisfaction (5)
Patient needs
Patients' response to practice administrative policies

Organisational

Visiting patterns (4)
Consultation length and pattern (3)
Time management (2)
Time management—a framework for priorities
Audits for annual report (2)
Patient compliance/management of appointments
Visiting the chronically ill
Activity analysis
Patient contacts
Self audit
Cost efficiency
Comparative consultation rates of nurses and doctors
Audit of audit
Structure and process
Age and sex registers
Summary of records
Clinical/management/financial
Payments
Computers

Finding time for peer review will present particular problems for singlehanded practitioners.

This survey confirms that medical audit is thought to be expensive in time and opportunity cost. General practitioners need help with many aspects of audit and must negotiate with family health services authorities and the government to receive it. It would seem there are additional training needs for doctors and practice staff. There are at present insufficient published work and organised courses available to enable general practitioners to approach audit with confidence. Recent practical handbooks are welcome and helpful,^{14 15} but much remains to be done. In order to ensure integration within existing educational structures audit training should be organised in consultation with regional advisers in general practice. There could be benefit in organising such training regionally.

Our survey shows that internal educational audit is already taking place, with doctors collecting information for their own interest. It is still unclear how the government intends to apply external audit within the profession to provide the second track of a complementary audit package.¹⁶ Many individuals and bodies may be involved in this, and it is important to avoid duplication of function and effort. One of the functions of the medical audit advisory groups of the family health services authorities will be to develop a strategy for medical audit in general practice. Practices have differing needs, interests, and expertise, and a diversity of approaches will be necessary in setting priorities for audit. A survey such as this could provide the necessary overview of audit activity levels and experience.

What is needed is constructive cooperation between the profession, medical audit advisory groups, family health service authorities, and the government to harness the innovation and enthusiasm for audit that our survey shows is a feature of general practice. Finally, it seems appropriate that the outcome of audit should itself be audited, to ensure that it is a valuable use of scarce professional time.

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