her career in general practice with only one or two patients dying following elective colorectal cancer resection. The contentious issue of the purchasers points immediately to the fact, quoted time and time again, that outcome audit must be performed or supervised by doctors.[17] The Scottish melanoma group is doctor-based and works well even after 15 years, with few lapses in follow-up data.[14]

To conclude, outcome audit is required as part of the management of patients with colorectal cancer, and this must be doctor-based. The current outpatient follow-up system is not ideal either in the short-term or for the long-term. However, there are advantages to a limited consultant outpatient review, which may be possible, and this would help to establish the long-term programme. The gathering of information needs to be computer-based with a simple form which could be completed by the consultant, the general practitioner or even the patient if it were correctly designed. This scheme has been elegantly set down by Macintyre, discussing the broader problems of follow up.[17] A proven rapid, simple solution is needed for the follow up of patients with colorectal cancer. Until such a solution is found, we in the medical profession must take on the added workload of providing good, long-term outcome audit in order that we, and our patients, can benefit from the data that will accrue from it.

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Changing patterns of consultation in general practice: fourth national morbidity study, 1991–1992

BRITISH general practice is a major resource for the study of morbidity in the population as barriers of access to services are minimal and coverage is almost complete. Information on the incidence and prevalence of common conditions, their secular trends and geographic and socioeconomic variation in their occurrence is of great importance in monitoring the health of the population, in determining health service policy, in measuring workload in general practice, in targeting interventions, and in allocating resources. Such information is complementary to that provided by routine mortality statistics and provides a more complete picture of the interactions between disease and health services. Information from general practice should also be of use in shaping undergraduate and postgraduate curricula for doctors and nurses, which are still dominated by diseases that interest teaching hospital doctors rather than the illnesses and other reasons that cause patients to consult in general practice.

Morbidity statistics from general practice collected in 1991–92 have been published recently.[1] Doctors and practice nurses in the 60 practices, in England and Wales, involved in the study recorded every face-to-face contact with patients who were on the practices' age–sex registers. The number of patients involved was substantial: 502 493 patients were on the practice lists for part of the year, giving 468 042 person-years of observation. The majority (83%) also had socioeconomic data recorded. Patients were representative of the general population when compared with the 1991 census. The practices were geographically diverse but tended to be larger and employed more ancillary staff; general practitioner principals were younger and more were authorized to carry out minor surgery than was typical in England and Wales. Most importantly, the practices had computer systems that permitted complete recording of morbidity. Unfortunately, such systems are used by only 34% of all practices in England and Wales. The lack of flexibility and compatibility and the low quality of many computer systems purchased for general practice has done untold damage to the ability to conduct such studies efficiently.

Data on consultations are complex and are presented in specific ways for different purposes. Patient consulting rates per 10 000 person-years at risk are presented throughout the report.[1] A consultation is defined as each diagnosis or reason for contact recorded during a contact; thus, a single surgery attendance might result in more than one consultation, following the convention used in the previous morbidity surveys.[2-5] On average, each contact resulted in 1.2 consultations. Use of person-years at risk makes allowance for people who were with practices for only part of a year. Incidence is defined as first and new consultations and prevalence is defined as at least one consultation in a year for a particular condition or disease.

It is essential to bear in mind that patient consulting rates do not represent the total incidence or prevalence of particular diseases or conditions but represent the proportion that is presented to doctors and nurses in general practice. It is likely that the more severe conditions, and those which cause bothersome symptoms, will be reported more often to general practitioners. In such cases, the estimates in the report are likely to approximate more closely to the true incidence or prevalence. Patient consulting rates are also dependent on the diagnostic accuracy of the doctors and nurses in the study, and consequently some conditions may be under- or over-diagnosed. Diagnoses were coded using Read codes which were then converted to *International classification of diseases* (ICD) diagnostic chapters and categories. There are limitations to the use of the ICD to classify consultations in general practice but its use allows valuable comparisons to be made with previous surveys in the United Kingdom and elsewhere, and with ICD coded mortality data.

In the study practices, 78% of patients consulted in the course of a year, ranging from 100% of children aged under five years to about 60% of young men aged between 20 and 24 years. The most common reasons for consulting (as a percentage of all consultations) were: respiratory diseases (31%); nervous system disorders, predominantly ear problems, (17%); musculoskeletal conditions (17%); skin and subcutaneous tissue conditions (15%); injuries and poisonings (14%); infectious and parasitic conditions, predominantly thrush, (14%); genito-urinary disorders, mainly cystitis, (11%); circulatory diseases (9%); digestive problems (9%); and mental disorders (7%). More people (33%) consulted for preventive health care — immunizations, contraception, screening, advice – than for any other single disease grouping.

Has general practice become busier? In 1981–82, 71% of the population consulted at least once,[5] whereas in 1991–92 this increased to 78%. Much of the increase was in the older age groups. The largest increases in the number of people consulting were for the most severe categories of disease (27% increase overall). The number of consultations also increased from 33 961 per 10 000 person-years at risk (that is, 3.4 consultations per person per year on average) in 1981–82 to 34 785 per 10 000 person-years at risk in 1991–92, a 2.4% increase. General practice is not only becoming busier but the people seen are more severely ill than a decade ago. Worryingly, the greatest increase in severity of conditions was in children aged under 15 years. A greater emphasis on preventive care is demonstrated by a threefold increase in such work among people aged 75 years and over (predominantly influenza immunizations and health checks) and a 67% rise overall, at all ages, when compared with 1981–82. Although the study practices may not be typical of all general practices, comparisons with the self-reports of consultations made by participants in the general household survey show remarkably good agreement, suggesting that these trends are broadly representative of the national scene.[6]

Are there any surprises? Consultation rates for mental disorders in men and women showed a decline of 9% and 16%, respectively, when compared with consultation rates in 1981–82. The explanation for this trend is not clear. Is it caused by a greater tendency to somatize mental illness problems? This is unlikely, as consultation rates for symptoms and ill-defined conditions also decreased. Is it possible that counsellors in primary care have taken on this work? If they have, there must be a lot of them as about 240 people per 10 000 population were no longer seen for mental illnesses (about five fewer new patients per week in a large group practice). It is more probable that the 'iceberg' of unreported mental illness has slipped deeper under the surface. This is an area for more research to clarify the issues, particularly as suicide rates among younger people continue to rise. Predictably, however, consultation rates for severe mental illness in the 1991–92 study were higher than in the 1981–82 study, reflecting the transfer of more patients from mental hospitals to community care.

Despite reductions in mortality rates from stroke over the last decade, the picture from primary care is markedly different. An increase of 65% between 1981–82 and 1991–92 in the rate of patients consulting at least once for stroke was reported. In contrast, consultation rates for acute myocardial infarction fell by one third, probably reflecting an increased tendency for patients with chest pain to go directly to hospital for acute treatment. Prevalence rates of angina increased by about two thirds, which may be a reflection of better detection and treatment of coronary heart disease.

In the 1991–92 report there is a wealth of detail on the geographic and socioeconomic associations with consultations. An innovation is the use of multivariate analysis to disentangle the importance of different factors in determining who consults the practice. The analysis takes the form of a mathematical model in which the dependent variable is the probability of consultation and the predictor (independent) variables are: need (local level standardized mortality ratios, chronic disease, socioeconomic variables, smoking, age and sex); supply (practice staff per 10 000 population); and access (distance from practice, rural or urban residence). The model shows that the effects of social class on consultation rates are attentuated once allowance has been made for other socioeconomic variables. Even so, people in manual social classes have 10% more consultations than white owner-occupiers from social classes 1 and 2. Unemployed people, those from ethnic minorities, and divorced and widowed people all tend to have higher rates of consultation.

Is this information of relevance to your general practice? National data are difficult to apply to local areas because of variations in geography and in the age structure and socioeconomic status of practice populations. The report presents a new approach — synthetic estimation — using the mathematical model and 1991 small-area census data to estimate local consultation rates more precisely than using the age–sex structure of the population. The mathematical model, which makes allowance for socioeconomic factors, tends to increase estimates of rates of consultation compared with simple age–sex estimation. A computer disc version of the report will include the necessary software to make local estimates of morbidity and consultation rates, and is likely to be of considerable value to commissioners of health services, including general practice fundholders.

The need for long-term commitment to the conduct of national morbidity studies is brought home by this fourth general practice report. The first study was carried out in 1955–56[2] with subsequent studies in 1970–72,[3,4] and in 1981–82.[5] The support of, and collaboration between, the Birmingham Research Unit of the Royal College of General Practitioners under Dr Douglas Fleming, the Office of Population Censuses and Surveys, and the Department of Health are vital aspects of these studies, helping to ensure continuity, high quality and comparability between

studies. This is a study of major importance, defining the nature of general practice in great detail. The authors have explained the data clearly and presented the material attractively. They, and the practices that contributed to the study, are to be commended for their success in carrying out this work to such a high standard. It is to be hoped that the next study will remain in these safe hands.

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