when boiling water is carried to the rooms.<sup>7</sup> It is hardly surprising that children living in such conditions frequently require hospital admission. Difficulties can also arise when teenage children have to share a bedroom with siblings of the opposite sex or with their parents.

In some instances families are not allowed to remain in their accommodation during the day and they may be forced to walk the streets. All bed and breakfast accommodation for homeless families should be available to the family all day.

The health visitor and social worker must be able to interview the families in their own accommodation and not be restricted to the main reception areas. Environmental health officers have statutory powers of entry and should always be called in when reasonable access has been refused. Where liaison between the health visitor and environmental health officer is unsatisfactory, the medical officer for environmental health should be asked to help. Further problems can arise if the housing department gives the health visitor the name of the husband only with no indication of family composition while the family is registered in the wife's name. Some landlords will then refuse access to health visitors. Housing departments must notify health visitors of the names of both parents, if known.

It is the children of homeless families that are particularly at risk; they have low levels of immunization and irregular developmental checks. The families need education in life skills, child care, family planning and other aspects of health promotion in an environment which is supportive and unhurried. There are two solutions. A local general practitioner could

take responsibility for homeless children and run a child health clinic or such a clinic could be run by the district health authority. In either case the health visitor should be present at the clinic sessions. District health authorities and family practitioner committees must ensure that appropriate provision is made for these families.

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# Future trends in general practice computing

SURVEY carried out at the end of 1986 by the NHS A Information Technology Branch gives the latest figures on 'computerized' general practices. This unfortunate term refers of course to the computerization of certain administrative tasks in the practice. The 514 replies to the survey provide interesting information about the present use of computers and future plans for this sample of practices. Ninety per cent used their computer for repeat prescribing but only 73% reported its use for patient registration, 72% for cervical cytology auditing, 61% for immunization recall and 52% for morbidity recording. The features which practices most desired to be developed further for computing were: practice accounts, use during consultations, standard problem classifications, a standard drug dictionary, word processing, morbidity recording and user definable search reports. 'Wider' developments which the practices would like to see included electronic mail and data links to hospitals and family practitioner committees and computer readable medical cards.

Experience in the first 10 years of microcomputing in general practice suggests that within the next decade most practices will be using computers for administrative tasks. We will see the widespread use of computers for practice accounts and wages and for preparing practice documents and reports. Most practices will be using remote data bases to receive up-to-date information on drugs, waiting lists, recommendations and regulations, helping organizations, standard procedures, diagnostic information and so on. Electronic mailing can be expected to replace telephone conversations and paper as the principal method of communication on administrative matters between surgeries, hospitals, family practitioner committees and district health authorities. Such communication requires only the necessary equipment. More difficult will be to agree on the format of common sets of data, such as a standard way of

identifying patients so that information can pass directly between data bases without further keyboard entering.

It is likely, however, that in the next decade electronic records will remain supplementary to the manual records which will continue to be the complete patient documentation ('the computer assisted record'). Although many more computer terminals will be sited in the consulting room their use will be restricted until general practitioners become skilled at incorporating computer use into their normal consultation style.

General practitioners have shown interest in a large range of computer applications<sup>2</sup> and not only in the administrative area. It has long been shown that repeat prescribing<sup>3</sup> can be more easily monitored with a computer but even this application may be superseded by pharmacists dispensing repeat prescriptions directly from Smart card technology.<sup>4</sup> In their clinical work, doctors have already shown how computers can facilitate many aspects of anticipatory care<sup>5</sup> and this may be the main thrust of general practice computing in the future. Computers will increasingly be used to obtain information from patients before the consultation or to provide health education. However, computer supported decision making in the diagnosis and management of acute problems<sup>6</sup> is a more problematic area. It holds out the possibility of reducing medical error and the value of such expert systems has been proved in limited areas such as patients presenting with abdominal pain at a hospital.<sup>7</sup> However, in the domain of general practice, it is more difficult to see how artificial intelligence can help in eliciting symptoms and signs and assessing priorities in management. In this century we can expect only limited applications in well defined areas, with the computer helping prevent mistakes, for example, by alerting doctors to possible adverse drug interactions in their prescribing.

Several unresolved issues will become more pressing as the use of computers in practices develops. The first is the responsibility for organizing preventive health measures. At the moment family practitioner committees operate cervical cytology recall systems and district health authorities carry out immunization recall. Practices with computers may prefer to do both themselves in the belief that their system is more reliable. There is thus an overlap between the statutory duties of health authorities and the aims of good general practice. The Korner Report on health services information in the community<sup>8</sup> recommends a community index based on family practitioner committee lists of basic registration data for carrying out immunization, screening and health promotion. There is thus the possibility of wasteful duplication of information about patients.

The government has advocated the use of computers in the assessment of standards in general practice. The College 10 also supports the development of practice information systems that will analyse the performance of doctors. Performance review figures on, for example, the uptake of cervical cytology can be extracted by a general report programme or even by special audit programmes.11 Many see the demand for accountability as threatening but the benefits of better information about general practice will far outweigh any loss of autonomy. For example, it may be demonstrated that the main barrier to better performance is poor patient compliance. Practice activity analysis will provide insight into differences in work patterns. varying use of resources and consulting patterns.

Many of the practices in the NHS survey showed a strong preference for developing standard problem classifications and morbidity recording. Most general practitioners have not found the time or incentive to undertake detailed morbidity recording and the complexities of the various classification systems seem irrelevant when simple recording of major diseases such as diabetes, hypertension and asthma is sufficient to lead to improvements in care. There are clearly gains to be made if general practitioners measure more of the clinical content of their work but a fine balance is required to prevent this intruding into patient contact. As a standard taxonomy of medical diseases. events and procedures emerges the aggregation of morbidity data from many practices may become a reality. It has yet to be shown that this will be of more value in resource allocation or providing epidemiological data than methods already in use.

Other concerns about the increasing use of computers include: the opportunity provided by accurate information to reduce list inflation,12 which some regard as compensation for income lost through delays in registration of new patients; and the Data Protection Act, which increases the pressure on general practitioners who are struggling to build up a data base in the face of incomplete records, poor patient recollection or even misinformation from patients.

Two problems for the future concern the source of funding of computers and the multiplicity of systems in existence. The NHS survey showed that 27% of general practice computers have been financed from central government, 15% from regional and district health authorities, 17% from pharmaceutical companies and 5% from other sources1 — over 60% in total. Although the cost of introducing computers would be reimbursed by increased item-of-service claims and savings in costs, innovative practices put themselves at a financial disadvantage in the short term. Two new schemes from AHA Meditel and Vamp Health offer the use of a sophisticated computer system in exchange for anonymous data on prescribing and morbidity and the scale of the undertaking is likely to transform general practice computing. However, entering the required data will be time consuming and, worse, may adversely affect communication in the consultation. A careful compromise needs to be found between the data collection needs of the practice and the

company. It is to be hoped that preoccupation with meeting their contractual obligations does not prevent general practitioners from pursuing their own objectives and that software development will be directed as much towards the aims of the practice as towards the requirements of the companies.

It seems likely that more suppliers of general practice computer systems will leave the market as it becomes dominated by a few large companies. This trend may be welcomed as the proliferation of commercial systems has probably not helped the progress of general practice computing. Computer systems should logically have been designed in a standard format, adaptable to the particular needs of different kinds of practice, but in fact they have used a variety of hardware, software and coding dictionaries to do similar things at different levels of sophistication. Staff training and support through local educational facilities could become feasible if only one or two systems are in use. The end result should be general practice computing that is less expensive and easier to learn.

Even with the support of large organizations doctors need to appreciate that introducing a computer system into the practice is a major task. A long term evaluation of the 'Micros for GPs' scheme<sup>13</sup> identified factors that contributed to the success of computing in a practice. These were: clear objectives for use of the computer, focused and carefully managed implementation, a practice manager committed to the success of the scheme, together with an actively involved partner, regular meetings to review progress, and doctors and staff prepared to devote extra time to establishing the system. Computers are a vehicle for improvement but introducing them into a practice requires adjustments which may be difficult for doctors, staff and patients. In the future practices will have an increasing need to learn management techniques to cope with the expanding role of general practice computing.

The next decade presents crucial challenges for general practice. We can take over more care from hospitals and improve our management of chronic diseases such as diabetes, hypertension, asthma and arthritis, at the same time delegating more tasks to practice nurses. Preventive medicine takes on ever greater importance as we fail to reduce the toll of disability and death from ischaemic heart disease and cancers. Unless we take the initiative in providing health education and preventive measures then these may be provided by others, leaving us to continue only in our traditional role of intervening in illness. With their defined lists and public respect UK general practitioners have an unrivalled opportunity to extend anticipatory care to the whole population. The practice computer makes it possible to give a consistent level of care to all our patients.

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### Depression in general practice

GENERAL practitioners see patients with ill-defined conditions which have a varying composition of physical, psychological and social disease. There have been numerous studies of depression in British general practice but there is no generally accepted estimate of the prevalence of patients with depressive illnesses. It is likely that the varying figures reflect differences in the attitudes and skills of general practitioners rather than differences in the true prevalence of depression in the community. The series of morbidity statistics from general practice<sup>1,2</sup> show a substantial increase in the prevalence of depressive illnesses over the years — an increase which almost certainly reflects rising awareness and improved diagnostic skills in general practice rather than any change in patients.

The fundamental questions concerning depression in general practice are: what exactly is it and how is it defined? how much of it is there? how is it recognized or not recognized by general practitioners? and how should it be treated and how well is that treatment given?

The new occasional paper, *The presentation of depression:* current approaches reopens the debate on the nature of depression in general practice and why it is often not recognized. In the introduction, Harris notes the factors which influence the patient's and the doctor's perceptions of depressive illness and how these factors are changing, for example the changing public attitude to psychotropic drugs.

Most of the individual papers concern the diagnosis of depression as defined by one of a number of screening tests. Copeland examines the use of one system of screening in a small number of elderly people in the USA and the UK and reports that 11% of patients on both sides of the Atlantic were defined as depressed.

Goldberg and colleagues from the Department of Psychiatry at Manchester show the extent to which patients present with what they believe are physical problems but which are likely to be symptoms of psychological problems and in particular depression. Given that patients with chronic physical conditions are liable to become depressed the diagnostic challenge for general practice is all the greater.

Few general practitioners are going to be able to use detailed questionnaires, even in their shortened form, to identify patients who may be depressed. What is hopeful, however, is that the number of questions that a general practitioner needs to ask to check for the possibility of a depressive illness is relatively small, and that other cues to diagnosing depression have been identified, such as the doctor feeling depressed during the consultation, recurring symptoms, as well as the probability that certain groups of symptoms, for example being tired all the time, are associated with depression.

Recent studies of the use of tricyclic antidepressants (Freeling P. Personal communication) suggest that these drugs are effective and can relieve a great deal of suffering. Just at a time when patients are coming to the conclusion that psychotropic drugs have been heavily over-prescribed, it will be a paradox if it becomes the general practitioner's job to use them more.

The presentation of depression: current approaches provides a rational strategy for detecting, diagnosing and treating patients suffering from a depressive illness in general practice.

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The presentation of depression: current approaches, Occasional paper 36, is available from the Central Sales Office, Royal College of General Practitioners, 14 Princes Gate, Hyde Park, London SW7 1PU, price £4.00 including postage. Cheques should be made payable to RCGP Enterprises Ltd. Access and Visa are welcome.

## Read any good papers lately?

ANEW section of the *Journal* begins this month and all readers, whether general practitioners or not, are invited to contribute.

'Fillers' derived from papers in other journals have always been popular with our readers and we are now setting aside up to two pages of the *Journal* for abstracts. The aim is to draw readers' attention to medical research that is important and interesting and is particularly relevant to primary care. We hope to cover reports of studies (or even reviews or case reports) which general practitioners might not normally encounter, from as wide a range of journals as possible.

The abstracts should briefly describe the study and its principal results, together with numbers or statistics, and could include a reference to another important work in the field, past or present. Contributors could comment on the methodology or relate the results to their own experiences. The length of the contributions will vary; this month's abstracts, compiled by the editorial board, range from 100 to 350 words, averaging about 250 words. Full details of the reference must be given (authors, initials, title, journal, year, volume, page range) and a copy of the article's own summary would be helpful.

So if you are too busy reading other people's research to do any yourself, why not share your learning with your colleagues?