information upon which they can base decisions concerning their own health, and doctors expect patients to take responsibility for these decisions. Practice leaflets are just one way in which doctors can inform their patients. The Quality Initiative and the involvement of the College in the *Well-being* series on Channel 4 television are other aspects of this general desire to make health and provision of health care subjects of open discussion and debate.

The provision of information to patients in the form of practice leaflets carries risks. The most obvious of these risks is that the General Medical Council may consider a leaflet to be advertising. In addition, there may be unexpressed and atavistic fears that providing information diminishes the doctor's mystique, or, more prosaically, that describing the services of a practice in a form which can be evaluated makes doctors vulnerable to criticism. While recognizing these fears, it is hoped that the provision of information can be increased.

The experience gained from establishing patient participation groups should allay many of the doubts and may prove useful for considering how practice leaflets might develop. Each patient participation group is different: the precise function and the composition of the

groups vary from place to place. This diversity is inevitable and desirable. The flexibility of general practice in meeting the different needs of different locations is one of its strengths: pluralism and individualism rather than stereotyped uniformity is to be encouraged. The role of the General Medical Council should be to establish guidelines within which an experimental approach to the provision of information can be explored and described. General practitioners are already showing an interest in the subject, as evidenced by the increase in requests to the Central Information Service at the College for examples of practice leaflets.

The compulsory production of practice leaflets must be resisted as it would be counter-productive. Leaflets might be seen as contracts and any deviation from the described services as the basis for legal action. It is to be hoped that the general practitioners elected to the General Medical Council will be able to draw attention to this issue.

While the discussion paper does not have the official status of College policy, it is the latest indication of the direction in which the College wishes to move. The involvement of patients in all aspects of health care should be a major issue for debate.

Computers in general practice: a personal view

Is the computer a devilish invention, to be avoided at all costs, or is it God's gift to general practice? Will its use lead to the destruction of practice as we know it, or will it instead take us on to a medical Utopia? Admittedly, nothing in life is clear cut. Nonetheless, I often feel that computers produce an unrealistic polarization of doctor types: at one extreme there is the enthusiast for the new technology prepared to ruin his family life by spending hours with his home computer, and at the opposite extreme the fervent reactionary prepared to do almost anything to avoid considering how the silicon chip might be used to help in his practice.

The computer is here to stay and, whether we like it or not it will increasingly be used in general practice. Although computers will have many benefits if used correctly, there will also be many pitfalls to trap the unthinking user. We must understand developments, we must experiment with ways of extending our role as general practitioners, and we must exploit to the full the potential of the computer. But how?

We have already seen the widespread introduction of microcomputers into routine practice procedures such as the registration of patients and recall systems. The first programs to help us with problems in prescribing are appearing and being developed. Computers are helping in the diagnosis of certain conditions, and also being used to take the initial history in certain situations.

Where will all this lead us? Can we envisage a situation where the computer first takes the history, then directs the doctor as to which parts of the patient to examine so that he (or more likely she) will be able to enter the findings into the computer, enabling it to arrive at the correct diagnosis and the preferred management plan? For most of us this would be a nightmare, and I cannot believe that the patient would be better off.

The great strength of general practice is in the successful marriage between technological medicine on the one hand and a personal continuing relationship on the other. The first aspect demands that we investigate and adapt for use all of the technological advances which will help us to diagnose illnesses and manage our patients more effectively and efficiently. The second aspect demands that we develop empathy for our patients which will produce a lasting relationship of trust, so that the patient will seek help in the early stages of the problem.

If these two aspects of practice are successfully combined, then I believe that general practice will be assured of a central place in the health care system for the next century. Of course, our role and tasks may well be different from those of today, but we will have survived if we have responded to the changing needs of the society we serve.

What are these needs? What are these changes? What will our role be? We can all ask the questions, yet the

challenge facing us today is whether we are prepared to go out and find some of the answers. Pioneers, developers, research workers, experimenters and openminded computer users are needed for tomorrow's general practice. Many people do not like change, are afraid of computers or are not aware of the changing needs of patients, and at times there is indeed sense and security in conservatism. In my opinion, now is not one of them.

Many prophets have warned that we are on the brink of a quantum leap into the future. I sincerely hope that we can take that leap while still retaining those aspects of general practice of lasting value to the patient and society. Remember our motto — Cum scientia caritas. Let us go forward under this banner.

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Clinical knowledge and education for general practice

THE majority of people with the majority of diseases are first seen in general practice. It is obvious that the least differentiated forms of illness are the most difficult to assess and the fact that problems have both physical and psychological origin and may present consecutively or simultaneously adds to the problems of the medical generalist. The very breadth of general practice has made it difficult to study the clinical care of common diseases and there has for a long time been a tremendous need to identify what constitutes good care in general practice for common clinical problems.

The current preoccupation in general practice with clinical standards may never end but practitioners are ceaselessly searching for a frame of reference which enables standards to be considered more usefully.

In Occasional Paper 27 Dr H. W. K. Acheson from the Department of General Practice at Manchester approaches these issues from a different perspective. First he concentrates on what practitioners know and tests factual knowledge albeit in a rough and ready way; and secondly he asks groups of practitioners to describe the actions they would make in certain defined situations. As a yardstick he asked the same questions to groups of consultants in the same specialty and thus has opened a new debate on the relevance and appropriateness of some forms of factual knowledge and some common actions in general practice.

Taken alone the replies on factual knowledge are thought-provoking. They certainly have implications both for undergraduate vocational training and continuing education for general practice. Equally the question of whether or not a random group of practitioners selected from around the country can validly be compared with a constant group who tended to be trainers is another question which merits discussion.

Finally the value of consultant viewpoint is a refreshing approach but cannot in itself be taken as a yardstick of care particularly when consultants are commenting on conditions they rarely meet or which they normally see at a much later stage in the natural history.

All in all, general practitioners interested in clinical care will find food for thought in this important study which is likely to pave the way for further analyses in the future.

Clinical knowledge and education for general practice, Occasional Paper 27, is available from the Publications Sales Office, Royal College of General Practitioners, 8 Queen Street, Edinburgh EH2 1JE, price £3.50 including postage. Payment should be made with order.

Exercise and cardiac arrest

To examine the risk of primary cardiac arrest during vigorous exercise, the wives of 133 men without known prior heart disease who had had primary cardiac arrest were interviewed. Cases were classified according to their activity at the time of cardiac arrest and the amount of their habitual vigorous activity. From interviews with wives of a random sample of healthy men, the amount of time members of the community spent in vigorous activity was estimated.

Among men with low levels of habitual activity, the relative risk of cardiac arrest during exercise compared with that at other times was 56 (95 per cent confidence limits, 23 to 131). The risk during exercise among men at the highest level of habitual activity was also elevated, but only by a factor of five (95 per cent confidence limits, 2 to 14). However, among the habitually vigorous men, the overall risk of cardiac arrest — during and not during vigorous activity — was only 40 per cent that of the sedentary men (95 per cent confidence limits, 0.23 to 0.67).

Although the risk of primary cardiac arrest is transiently increased during vigorous exercise habitual vigorous exercise is associated with an overall decreased risk of primary cardiac arrest.

Source: Siscovick DS, Weiss NS, Fletcher RH, et al. The incidence of primary cardiac arrest during vigorous exercise. N Engl J Med 1984; 311: 874-877.