probability statement which in the absence of certainty carries the possibility of error.

There is a place for rules in medicine, rules which can only be broken in exceptional circumstances and which if ignored carry the possibility of grave harm. Such rules can only properly exist when there is good evidence of their value. For the most part good rules are concerned with potentially life threatening situations, in which failure to make an appropriate response may have serious consequences. In a sense these are simple situations in which there can be no difference of opinion about the immediate necessities.

Such simple situations are the exception and the notion that rules can be devised for medicine as a whole carries the danger of great harm. As knowledge grows rules become more appropriate. Because the nature of a car engine is well understood it is easy to devise rules for detecting faults. Because of our ignorance it is impossible to devise rules which will always apply to the individual who seeks our help.

There is a growing tendency, prompted by a desire to improve standards in medicine, to promulgate guidelines and consensus statements. This is potentially dangerous as it attempts to simplify situations which are inherently complex and not amenable to management by rule. As a result physicians may be forced to act in ways which will harm their patients in order to protect themselves from possible action in the courts.

Most decisions in medicine are not simple and straightforward but require the exercise of judgement to advise the best option for each patient. Attempts to oversimplify, even from the best of motives, carry the danger of widespread iatrogenic harm. We must take care that guidelines remain just that, and are not taken to describe accepted and desirable practice. We need to cultivate judgement and come to accept that its inherent risks are in the best interests of our patients.

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## References

- 1. Fox T. Purposes of medicine. *Lancet* 1965; **2:** 801-805.
- Skrabanek P, McCormick J. Follies and fallacies in medicine. 2nd edition. Glasgow: Tarragon Press, 1992.
- Nazareth I, King M. Decision making by general practitioners in diagnosis and management of lower urinary tract symptoms in women. *BMJ* 1993; 306: 1103-1106.
  Sever P, Beevers G, Bulpitt C, et al. Management guidelines in
- Sever P, Beevers G, Bulpitt C, et al. Management guidelines in essential hypertension: report of the second working party of the British Hypertension Society. BMJ 1993; 306: 983-987.

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# Health checks — time to check out?

THE British family heart study, reported on page 62 of the Journal, involved 3850 patients from 26 practices in 13 towns across the United Kingdom. It shows how research in general practice should be done — with the active involvement of general practitioners, other members of primary care teams and local family health services authorities and health boards. It shows that large scale, pragmatic clinical trials which can inform government health policy can be conducted by university departments of general practice. It shows that clinical questions of importance to primary care can be answered within primary care. That is the good news, that health checks have been good for general practice research. The bad news is that the workload generated by health checks is daunting. The most important statistic from the British family heart study paper is that 79% of patients merited follow up for one or more risk factors.

The burden of health checks lies not in screening but in subsequent intervention and follow up. We know from the south east London study that screening for cardiovascular risk in general practice achieves nothing unless an effective intervention is offered to reduce the risk identified.<sup>2</sup> The recently reported three to five year follow up of health checks carried out among 502 men in one practice in Wales confirms this observation.<sup>3</sup> The final results of the British family heart study, and the first year results of the parallel Oxcheck trial,<sup>4</sup> will be published in the near future. Whatever the level of benefit shown, if the resources for effective intervention are unavailable in most practices, it is unethical to continue to offer health checks. But it is also unethical to ditch the baby with the bath water and to abandon all responsibility for preventing coronary heart disease.

Some preventive interventions in general practice are of proven effectiveness and we owe it to our patients to offer them. Much of the confusion about the value of preventive medicine arises from a failure to differentiate between potential risk reduction and the extent to which this potential can be realized in clinical practice. The fact that clinical trials of cholesterol lowering drugs have not shown a reduction in overall mortality does not mean that the epidemiology is misleading and the potential to reduce risk by lowering cholesterol level does not exist. In many ways the epidemiological findings, based on long-term comparison of mortality between individuals and between countries with different cholesterol levels, are more robust than the clinical trials. It does mean that realizing the potential is not easy and depends on finding an intervention strategy which is effective and can be sustained over time. The two primary care interventions which are of proven effectiveness are the treatment of hypertension and the provision of smoking cessation advice and support.<sup>5</sup> We also know that practice nurses have a key role to play in these interventions. In blood pressure management, systematic care from nurses is still the most likely way to achieve success.<sup>6</sup> Similarly, although initial advice from practice nurses to stop smoking is of doubtful effectiveness, systematic follow up of motivated patients by nurses as part of a team approach can achieve a three month sustained smoking cessation rate as high as 19%.7

What about exercise and diet? There is little doubt that cardiovascular risk can be reduced by increasing exercise and by following a healthy diet. As lack of exercise and a high saturated fat, low vegetable diet are endemic in the UK, the potential for health gain is great. But the feasibility of giving effective advice within the resources available in general practice remains unproven. There has been only one controlled trial of exercise promotion in general practice reported from the UK, which was limited to two practices in the New Forest and showed a small increase in the number of patients exercising. Until we are sure we can provide effective advice on diet and exercise, there seems little point in investing scarce practice resources. Providing effective systematic intervention on smoking and blood pressure alone will be as much as most practices can cope with.

The other area which merits attention on the basis of proven effectiveness is secondary prevention in patients with angina and previous myocardial infarction. We know we can reduce mortality in patients who have had heart attacks by up to 20% by a number of strategies including aspirin, beta-adrenoceptor blocking drugs, anticoagulation, smoking cessation and lipid lowering; rehabilitation programmes including one or more of these strategies plus a graduated exercise programme may be even more effective. 9,10 We also know from the British family heart study that modifiable risk factors were present in 86% of the 139 patients identified with existing coronary heart disease.1 There are still a number of questions to be answered before we embark on a full-scale primary care based secondary prevention programme, including the best way to identify patients, the role of hospital services, the synergism between different interventions, and the intensity of primary care support needed. But while we await answers to these research questions, there is sufficient evidence of potential benefit to justify setting up a practice register and checking whether such patients have had their blood pressure checked, whether smoking cessation advice has been successful, and whether prophylactic drug treatment has been considered.

So, my conclusion is that it may be time to 'check out' when the two trials report, but we must not check out of all responsibility for preventing cardiovascular disease. Above all, general practitioners must not forget the benefits of a population approach. The case for this approach, made so convincingly by Rose, 11 is based on three observations: treating only those at highest risk makes little difference to overall morbidity or mortality; the absolute number of people at high risk is determined by the overall distribution of risk in the population; and achieving change in those at highest risk is largely dependent on changing cultural attitudes in the whole population. These observations hold for a wide variety of diseases and countries; they also accord with clinical experience. A population approach is the only way of achieving a substantial reduction in the burden of disease and UK general practitioners remain in a unique position of access and responsibility to their registered practice populations.

Our middle aged patients continue to die prematurely from heart attacks and we have two key contributions to make to an effective population strategy. General practitioners are trusted figures in the local community with a responsibility to abstain from smoking; to fill their shopping basket with fruit, vegetables, garlic and olive oil (and not too much red wine); and to be seen jogging gently around the practice at least twice a week. This is important but, despite the jogging, it is the easy bit. Much more difficult is the need to capitalize on the skills developed by practice nurses and other members of the primary care team in the provision of health checks in order to establish a more effective programme for the identification and management of patients with high blood pressure and of patients with motivation to stop smoking. The primary care team must approach cardiovascular prevention as it would cancer screening — with the same systematic approach (including a call-recall system) and the same emphasis on audit and quality control. Well organized practices may also find the resources to involve themselves in secondary prevention, but it is important to take one step at a time and to remember that identification of risk is only the beginning.

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### References

- Family heart study group. British family heart study: its design and method, and prevalence of cardiovascular risk factors. Br J Gen Pract 1994: 44: 62-67.
- The south east London screening group. A controlled trial of multiphasic screening in middle-age: results of the south-east London screening study. Int J Epidemiol 1977; 6: 357-363.
- Gibbins R, Riley M, Brimble P. Effectiveness of a programme for reducing cardiovascular risk for men in one general practice. BMJ 1993; **306:** 1652-1655.
- ICRF Oxcheck study group. Prevalence of risk factors for heart disease in the Oxcheck trial: implications for primary care. BMJ 1991; 302: 1057-1060.
- Fowler G, Mant D. Health checks for adults. BMJ 1990; 300:
- Robson J, Boomla K, Fitzpatrick S, et al. Using nurses for practice activities with computer assisted follow-up: a randomised controlled trial. BMJ 1989; 298: 433-436.
- ICRF general practice research group. The effectiveness of a transdermal nicotine patch in helping heavy smokers to stop smoking: results of a randomised trial in UK general practice. BMJ 1993; 306: 1304-1308.
- Campbell MJ, Brown D, Waters WE. Can general practitioners influence exercise habits? A controlled trial. *BMJ* 1985; **290**: 1043-1046.
- Lau J. Antman E, Jimenez-Silva J. Cumulative meta-analysis of therapeutic trails for myocardial infarction. N Engl J Med 1992; **327:** 248-254.
- Yusuf S, Wittes J, Friedman L. Overview of results of randomised clinical trials in heart disease: treatment following myocardial infarction. JAMA 1988; 260: 2088-2093
- Rose G. Strategy for prevention. Oxford: Radcliffe Medical Press,

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# **MRCGP EXAMINATION – 1994**

The dates and venues of the next two examinations for Membership are as follows:

May/July 1994

Written papers: Wednesday 4 May 1994 at centres in London,

Manchester, Edinburgh, Newcastle, Cardiff, Belfast, Dublin, Liverpool, Ripon, Birmingham,

Bristol and Sennelager.

Oral examinations: In Edinburgh from Monday 27 to Wednesday 29

June inclusive and in London from Thursday 30

June to Saturday 9 July inclusive.

The closing date for the receipt of applications is Friday 25 February 1994.

October/December 1994

Written papers: Tuesday 25 October 1994 at those centres listed

above.

Oral examinations: In Edinburgh on Monday 5 and Tuesday 6

December and in London from Wednesday 7 to Monday 12 December inclusive.

The closing date for the receipt of applications

is Friday 2 September 1994.

MRCGP is an additional registrable qualification and provides evidence of competence in child health surveillance for accreditation.

For further information and an application form please write to the Examination Department, Royal College of General Practitioners, 14 Princes Gate, Hyde Park, London SW7 1PU, or telephone: 071-581 3232.