tions are labelled with a warning that patients should see a doctor if pain remains after four weeks. There is a further warning against the possible increase in blood alcohol concentration after drinking when cimetidine is taken at the same time, and there are instructions never to start self treatment if other medicines are being taken or when the person is aged over 65.

After five years' availability of cimetidine and ranitidine, over the counter monitoring of adverse drug reactions shows no reason to change the view that these drugs pose no major safety problems.^{4,5} There has also been no appreciable increase in consumption of the drugs, although a slight increase was seen intermittently in 1991, and the pattern of admissions to hospital for complications of ulcer disease has not changed.⁴

A major problem—particularly with gastro-oesophageal reflux disease—is that some patients may prefer medication and relief of symptoms to changing their lifestyle and avoiding provoking factors such as alcohol and cigarette smoking.^{4,6} This problem would not, however, be eliminated if the availability of these drugs was restricted to prescription only.

When over the counter status was recommended five years ago the therapeutic strategy for diseases related to gastric acid was somewhat different from that today. The proton pump inhibitors, which have now become more widely used, are still prescription only drugs, with an automatic subvention. We believe that only a small proportion (around 5%) of H₂ blockers are sold over the counter because the costs are subsidised when these drugs are prescribed by a doctor. In this way confounding factors make drawing conclusions more difficult.

Another important change is our knowledge of *Helicobacter pylori* as the cause of recurrent duodenal ulcers and of some gastric ulcers.⁷ The recommended strategy is now to treat these conditions with antibiotics in combination with proton pump inhibitors or H₂ blockers after diagnosis by endoscopy and tests for the presence of

Helicobacter. This approach flies in the face of symptomatic use of H₂ blockers.

The possible consequences of making H₂ antagonists available over the counter in the United States have been analysed in a model that used decision analysis; the conclusion was that the drugs could be a relatively safe and effective means of self treatment that might reduce the number of patients who seek professional care.⁸ In Britain cimetidine and famotidine were released from prescription control in January this year for short term (a maximum of two weeks) treatment of dyspepsia.⁹ This period is not sufficient to ensure healing of ulcers. In Denmark the duration of treatment for over the counter products is not limited and the full dose is recommended.

Our conclusion is that diseases related to gastric acid should ideally be diagnosed and treated by experts. But from a safety point of view it is still reasonable to keep the H₂ blocking agents available over the counter.

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Prescribing exercise in general practice

Look before you leap

Exercise is good for us, especially as we get older.^{1,2} People who are regularly active enjoy a lower risk of osteoporosis and a much reduced risk of coronary heart disease (the vigorously active have about half the risk of the inactive). Most people in Britain are not taking enough exercise to achieve these health benefits.^{3,4}

If primary health care teams could increase their practice populations' physical activity then many benefits might follow, including lower rates of cardiovascular disease, fewer fractured hips, reduced depression and anxiety, and improved functional ability in elderly people. Although this list makes promotion of healthy exercise look tempting, primary health care teams, and the policymakers who determine allocation of resources, should look carefully before they leap.

Very little is known about the effectiveness of exercise programmes and other initiatives designed to increase non-athletes' activity levels. The question of effectiveness should be answered by randomised controlled trials, although these are difficult to conduct in the community.⁵

After an extensive search we identified only 12 such trials,* none of them conducted in Britain, with few including those subjects with most to gain from increased exercise—middle aged and elderly people.

Moreover, the results of these trials are not particularly encouraging. The increase in activity is not great and, in so far as a sustained increase is observed, subjects seemed to prefer home based, self monitored exercise programmes rather than the programmes carried out at sports facilities that are currently popular "on prescription." In this discussion we should not forget that physical fitness and health status are interrelated but not synonymous, and improving fitness may not reduce the consequences of disease.⁶

Thus before investing time and resources in prescribing exercise general practitioners need to answer four questions. Can people who do not exercise be recruited to an exercise programme by their doctors? Does a short term

*Details of these trials are available from Margaret Thorogood.

exercise programme tailored to individual needs initiate long term changes in exercise behaviour? If so, among whom will such changes be most effectively maintained? Does investing resources in the promotion of healthy exercise in this way affect morbidity or the use of health services? As with many other initiatives promoting health, there is a danger that effort and resources may be misspent in promoting exercise to those who would have taken it up anyway, the "worried well." This group is likely to be younger and already more fit and active than average.

Many barriers exist to increasing physical activity, particularly through formal exercise programmes, which may be perceived as competitive and intimidating.⁷ Other obstacles to participation include boredom with exercises, lack of knowledge of how to get involved in exercise programmes, difficulties with transport to exercise sessions, lack of self discipline, and concerns about exercise exacerbating existing medical problems.¹

Developing an exercise programme for those most likely to benefit requires further study of the factors that influence uptake and adherence and of how to tailor programmes to match people's changing needs. Work on brief interventions in medical settings suggests that practitioners should use a menu of strategies, selecting one that matches the patient's readiness to change. "Prescribing" behavioural change may lead to resistance; giving patients more freedom of choice is likely to lead to better outcomes.⁸ A leisure centre should not be the only choice on offer.

Biddle and Mutrie have identified four problems that need to be addressed when exercise programmes are designed: getting started; keeping going with regular exercise; avoiding the start-stop syndrome; and improving knowledge about fitness.⁹ General practitioners or practice nurses may use these as starting points to construct and evaluate exercise programmes. We need to learn more about the successes and failures of pioneering projects; anecdotal data will not do. Any future prescription for

exercise programmes should be carefully evaluated; the results will help in the design of a definitive multicentre trial. Unevaluated initiatives may be of no more value than prescribing coloured water.

While we await the results of careful evaluation, primary health care teams should look closely before they leap into prescribing exercise. There may be many far more effective ways for them to use their resources to increase the fitness of their practice populations.

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Locally determined performance related pay

Better levers exist for improving performance in a health service with disparate values

At the end of August doctors from around Britain will meet in London to pursue their battle against the introduction of locally determined performance related pay within the NHS. According to the BMA no other issue since the start of the reforms has aroused such a consistent and united response from ordinary doctors working in hospitals and community trusts. Why the anger, and what are the principles at stake?

The move towards performance related pay was heralded in the Citizen's Charter, which promised that public sector workers' pay would be more closely related to performance. Earlier this year the Department of Health suggested amending the terms of service of all NHS staff to allow an element of pay to be determined locally on the basis of individual performance. Since then negotiations have continued, but the government has asked the Doctors and Dentists Review Body to make only a minimum award next year, to leave room for local supplementation; and it has told all NHS employers to establish mechanisms for local pay bargaining by next spring.

Doctors' concerns are twofold. Firstly, they fear the threat that local pay bargaining poses to a national health service. Secondly, they question the benefits of systems that tie pay rises to a formal appraisal of how an individual has met certain performance criteria. Their concerns cover both matters of principle and the practicalities of measuring performance. But they also reflect the underlying rift in the NHS between political-managerial priorities and clinical ones.

Firstly, doctors dispute that performance related pay schemes improve performance. Evidence suggests that at best such schemes produce only marginal improvements and at worst demotivate and divide.^{1,2} The reasons for this are complex. Demming, one of the founders of the quality movement, criticised performance related reward systems for creating perverse incentives.³ In most cases, he argued, individual workers are doing their best; what prevents them from doing better is the system they work in, and the solution is not to set individuals in competition with one another but to organise their work so that collaboratively