part of the lifetime incidence quoted above (3.9%)—which suggests that overtreatment occurs in two of three patients.

The sensitivity, specificity, and positive predictive values of all three diagnostic tests (digital rectal examination, prostate specific antigen, and transrectal ultrasonography) are too low to justify their use. 10 The use of each alone would result in many unnecessarily worried men and unwarranted prostate biopsies. Unfortunately we do not yet know the accuracy of the three tests in combination. The low specificity and positive predictive value is not, however, the only reason for not recommending the routine use of these tests. Early detection regimens should not be applied unless benefit is shown in terms of reduced mortality from cancer in randomised prospective trials. This is not the case.

There is, however, considerable pressure in many parts of the world to apply these methods as screening tests. Pressure comes from patients but also from doctors. In the United States the American Cancer Society and the American Urological Association recommend an annual rectal examination for men aged over 50. A recent survey has shown that most American urologists will also test for prostate specific antigen in any patient in that age group who walks into their office.11 In Germany population screening for prostate cancer has been a policy since 1978, and in Belgium an insurance supported annual check up includes a rectal examination.

Yet screening should not be recommended as public health policy until clear benefit in terms of reduced mortality from cancer can be shown in prospective screening studies. Such studies need to be carried out urgently, but in the meantime it seems that both public and profession are ready to accept a considerable possibility of overtreatment.

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## Waiting times for outpatient appointments

Time for ideas to come out of academe and into the clinic

As the financial year 1992-3 draws to a close some hospitals are already asking their doctors to stop admitting patients for elective surgery until the new financial year. This may limit the ability of these hospitals to meet their pledges of maximum inpatient waiting times of two years. The fact that some providers, including NHS trusts, have run out of money is not solely a problem of inefficiency or poor resource management (although it may be in some cases); it is also a reflection of the diversity and complexity of the demand for health care, which makes it so unpredictable. National guarantees cannot possibly take account of this variation, and standards can often only be met at a cost elsewhere. One of the worries about the limit on inpatient waiting times was that instead of tackling long waiting it would merely shift delays and patients would end up waiting longer for outpatient consultations.

Inpatient waiting times have long been the focus of attention, but for many patients waiting to be admitted to hospital is just the tip of a "waiting iceberg." British patients wait longer than most of their European neighbours to be seen by a hospital doctor, and for many the wait is not just weeks but months—months that may potentially make a great difference to their condition, as German et al show (p 429).1a Some women wait a year for a consultation with a gynaecologist.

The wait for an outpatient appointment is invisible. The NHS still lacks a systematic method of collecting information about outpatient waiting. The most commonly used statistic is average waiting time per specialty, but that figure varies with local definitions and is so skewed by interconsultant variation that it is virtually meaningless. Some regions do not

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produce even these data. Research too has overlooked outpatient waiting, concentrating instead on waits for inpatient procedures or general practitioner referral patterns. The publication of Waiting times for first outpatient appointments in the NHS,2 the report of a workshop commissioned by the Department of Health, therefore provides a timely reminder of the issues and offers some worthwhile solutions.

Reliable, up to date information about outpatient waiting times is essential. The report points out that most hospital computers could provide these data. We also need meaningful alternatives to measuring performance by averages, and the report argues that looking at centiles (for example, the time within which 90% of patients were seen) may give a better view of the situation. The report also urges greater communication, especially between consultants and general practitioners, not just about waiting times but about referral objectives and patient follow up too.

This is not the first time such suggestions have been made. Indeed, followers of the waiting list debate may experience déjà vu when reading this report. Back in 1978 the Department of Health and Social Security brought together clinicians, statisticians, health service researchers, economists, and civil servants for a similar seminar addressing waiting times for hospital treatment.3 Among the papers presented was a description of the "operations room" at the Ipswich Hospital (a Portakabin), whose staff held, coordinated, and above all, integrated information about waiting lists and waiting times. Wall charts and card indexes displayed data on inpatient waiting, new referrals, numbers waiting for an appointment, and waiting times for first non-urgent appointments as well as information on theatre availability and bed

BMJ VOLUME 306 13 FEBRUARY 1993 state. Information on inpatient and outpatient waiting times by specialty and consultant was sent, every three months, to local general practitioners, who had the additional benefit of a direct, ex-directory telephone link to the centre to make inquiries. Other equally cogent suggestions for improvements in information systems and outpatient waiting list management have been voiced but have gone, it seems, unheard.4-6

The NHS is modelled on the "patient patient." When it was born rationing was a part of everyday life and people queued quietly for health care just as in the war they had queued for food. Consumerism, medical progress, and the Patient's Charter make delay less acceptable. Patients are now being promised local charter standards for waiting times for first outpatient appointments and maximum clinic waiting times of 30 minutes.7 The workshop participants rightly urge caution in setting national standards for outpatient waiting times, in favour of targets which could "allow differential rates of progress."

Waiting in one area is contingent on activity in others. The choices being made by purchasers and providers will have an impact, and in some places extra resources may be required. That said, there are opportunities to reduce outpatient waiting times. We have to find ways of managing waiting more effectively and keeping the customer (be it general practitioner or patient) informed. On the research agenda we need to look at organisation, information, and communication, and it may be time, as this new report suggests, to debate and reconsider the role of outpatient clinics. The ideas are there; now they must come out of academe and into the clinic.

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## Screening for hypertrophic cardiomyopathy

## Not yet feasible

Last autumn the Hypertrophic Cardiomyopathy Association launched a campaign to raise awareness of hypertrophic cardiomyopathy and, together with the Sports Council's National Sports Medicine Institute, announced a pilot screening programme to detect the condition among young athletes.1 The association's aims are laudable: counselling and support, provision of information, promotion of increased awareness to both the public and doctors, and support for research. Specific screening campaigns, however, should be based on a logical, not purely emotional, response to tragic cases. Any screening programme needs to fulfil several clear conditions: the disease should be common (or important in its effects); there must be a reliable screening procedure to detect disease early; and treatment should be available to modify the outcome. Does hypertrophic cardiomyopathy meet these conditions?

Certainly the condition has potentially devastating effects, as the tragic cases of sudden death in apparently fit young people described by the association illustrate. However, the condition is not common. The incidence is estimated to be 2.5/100 000/year with a prevalence of 20/100 000.2 The condition is associated with a high incidence of sudden death (2.5% per year in adults and 6% in children and adolescents<sup>3</sup>), and it is the commonest recognised cause of sudden death in competitive athletes.4 Sudden death associated with exercise is a major cause of death in hypertrophic cardiomyopathy,5 and as a result patients with the disease are recommended to avoid strenuous exercise.6

Screening for hypertrophic cardiomyopathy can be done either by echocardiography or by genetic screening. Echocardiography is superficially appealing since the technique is non-invasive and relatively cheap. It is, however, fraught with problems. Even in relatives of known patients there is heterogeneity in the echocardiographic findings.7 No systematic data are available on the population prevalence

of possible echocardiographic criteria for diagnosing hypertrophic cardiomyopathy, but one study has found asymmetric septal hypertrophy in 8% of a general population with heart disease other than hypertrophic cardiomyopathy.7 Distinguishing between the hypertrophied heart of the athlete and hypertrophic cardiomyopathy can be difficult,8 and the athletic population is a proposed target for screening. An echo technique using analysis of diastolic flow patterns may be more sensitive.9 The natural history of the disease also makes it unsuitable for screening by imaging techniques: a normal scan now is no guarantee of a normal heart in the future.10 Electrocardiographic screening, while even cheaper and more widely available, is less specific and sensitive.

In about half of all cases hypertrophic cardiomyopathy is familial, the remaining cases presumably arising from sporadic mutation.11 In those families with a clear genetic link hypertrophic cardiomyopathy seems in many to be inherited as a dominant gene with a high degree of penetrance.<sup>12</sup> The recent finding of mutations in the gene coding for β-myosin heavy chain in some families with the condition<sup>13</sup> has both clarified the nature of the genetic defect and simultaneously raised the prospect of some form of genetic screening.<sup>14</sup> Of those families with documented familial hypertrophic cardiomyopathy, however, only about half have identifiable mutations related to the β-myosin heavy chain gene,13 15 and little is known of the incidence of genetic abnormalities in non-familial cases. In familial cases without a gene defect regular echocardiograms are the only practicable screening method.

As yet there is little definitive evidence that treatment improves prognosis in patients with symptomatic hypertrophic cardiomyopathy. There are no data from prospective randomised controlled trials. A retrospective study showed that amiodarone was associated with a better prognosis in patients with documented ventricular tachycardia on