Obviously detecting small high risk groups is the most cost effective strategy. If cost effectiveness were our main aim then we might choose, for example, to include in our preventive programmes only people with diastolic blood pressure over 120 mm Hg or alcohol consumption of over 40 units a week or recommend mammography only for women with a family history of breast cancer. Most preventable morbidity is not, however, found in the small high risk groups but in the much larger populations at lesser risk.¹ The only rational policy to maximise prevention is to screen everyone. Constraints on resources limit the effectiveness of all health programmes. They are nevertheless a domestic issue, varying greatly from time to time and from place to place, and should never dictate national policies. The amount of preventive work instituted must therefore be decided at a local level. Some practices, struggling in adverse circumstances to maintain the most basic standards of reactive care, can do very little. Others should do much more. For example, in my small rural practice, mainly opportunistically, smoking state has been ascertained in 95% of adult patients and serum cholesterol concentrations estimated in half of them, but these are not figures that many working in less privileged conditions could be expected to achieve.

Primary health care teams should make up their own minds as to how much they can do. Help from other professionals such as epidemiologists, cardiologists, and lipid experts is essential in considering cardiovascular risk factors; their advice on whom we should screen, however, is both irrelevant and unhelpful.

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Obstetrics after the white paper

SIR,—I support many of Professor Geoffrey Chamberlain's views. Much of what he believes is under threat in the white paper, however, is already in danger, both from the financial realities of the current climate and from other factors—for example, medical litigation and increasing birth rates.

I see the advent of the white paper as an opportunity to deal with these problems in new and innovative ways. A blanket rejection of the government's proposals may be an appropriate initial negotiating stance, but to miss the chance to improve our service in subsequent discussion will be a lost opportunity. Though the clinical resource budgeting exercise has not been fully evaluated, most progressive units have already implemented its principles.

As a clinical director and budget holder for obstetrics and gynaecology for four years I am convinced by clinical resource management. It provides the mechanism to link resources to demand, to improve efficiency, and to attain the best possible service in a tough financial climate. At this hospital the budget for obstetrics and gynaecology has fallen in real terms by £250 000 in five years, when the birth rate has increased by 28% in our district. Without resource management we would not have a service, let alone motivated staff providing a high class service.

The white paper proposes change, which in itself is commonly difficult to accept. The problems that are being blamed on it were with us well before

March 1989. More money without a change in practice and organisation will not solve our current problem.

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Treatment of obstruction of urinary outflow

SIR,—Mr G Williams and colleagues presented an interesting modification of urethral stenting as a treatment for bladder outflow obstruction.¹ We believe the mortality rates after transurethral resection of the prostate quoted in their paper do not accurately reflect current urological practice.²

Surgical audit in the Royal Infirmary of Edinburgh from January 1984 to December 1988 showed an overall postoperative mortality from transurethral resection of the prostate of 0.18% (four deaths in 2197 operations: 2/411 in 1984, 0/386 in 1985, 1/454 in 1986, 0/422 in 1987, and 1/524 in 1988).

Earlier audit of all transurethral resections of the prostate carried out in Scotland in the early 1970s showed a mortality of 1.4% (73 of 5190).³ We believe that the improvement reflects advances in regional and general anaesthesia and further development of urological centres. On the rare occasion when long term catheterisation has been preferred this is almost invariably as a consequence of the patient's immobility and mental state rather than as an absolute contraindication to anaesthetic.

Urinary tract stenting is of proved benefit in managing recurrent urethral strictures as an alternative to urethroplasty.⁴ The rate of early complications is satisfactorily low where stent incorporation and epithelialisation have occurred. Intra-prostatic stents are in contact with urine, and calcific encrustation and infection may be a greater problem in the long term compared with urethral stents. Further, if it is necessary to remove the prostatic stent a major open surgical procedure would be required.

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Incidence of burns in Birmingham

SIR,—The conclusions of Dr V Vipulendran and colleagues concerning the incidence of burns in Asian children in Birmingham¹ are in fact erroneous. Since 1980 the proportion of births to Asian parents in the city has risen from 22% to 25% of the overall number.² Hence, as the most vulnerable age group for serious burns is the preschool age group, their finding that 25% of admissions for such burns were of Asian children actually means that they have the same risk as non-Asian children, not a greater risk. There is therefore no evidence to suggest that the children of Asian immigrants live in less safe environments than their non-Asian

peers, or that their parents are in more need of education.

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Hypercalcaemia in malignancy

SIR,—Dr David Heath suggested that intravenous fluids and disodium etidronate were the current treatment of choice for hypercalcaemia in cancer.

We have recently studied the effects of this regimen in 16 patients with hypercalcaemia associated with cancer; one required the addition of calcitonin to control serum calcium concentrations adequately and only five (31%) were rendered normocalcaemic. While Hasling *et al*¹ and Ryzen *et al*² reported a 73%-90% rate of "normocalcaemia" in patients treated with intravenous etidronate, neither group adjusted for albumin concentration. As Dr Heath reminds us, this is important since most patients are hypoalbuminaemic. Thus, Kanis *et al*, using a similar regimen, found that total calcium values fell to "normal" in 84% of cases whereas albumin adjusted values were normal in only 15%.³

The not infrequent failure of etidronate and other bisphosphonates to achieve normocalcaemia in this condition is due to the fact that renal tubular calcium reabsorption is increased⁴ and remains so even after sodium repletion.⁵ This prevents the kidney from excreting bone derived calcium, largely explains the poor correlation between bone metastases and hypercalcaemia,⁶ and is often the primary pathogenic event.⁸ Recent work, cited by Dr Heath, shows that this is due to the renal tubular effects of the parathyroid hormone related peptide.⁹ Etidronate and even clodronate¹⁰ often cannot reduce the filtered calcium load enough to achieve normocalcaemia in the face of this abnormality although pamidronate does so more often because it is a more potent osteoclast inhibitor.¹¹

We were concerned by the suggestion that fluids and etidronate may be suitable treatment for life threatening hypercalcaemia. The fluid regimen suggested is unlikely to reduce serum calcium by more than 0.30 mmol/l in the first 48 hours of treatment and in some patients the hypercalcaemia will deteriorate.¹¹ Since two to three days will have elapsed before the etidronate itself starts to work,⁴ this regimen would be inadequate in patients with serum calcium concentrations of 4.00 mmol/l or more, and some may die before the bisphosphonate has had time to take effect.¹²

We have used a combination of calcitonin and bisphosphonates to good effect in this situation¹³: the rapid effect of the calcitonin stabilises the condition while the bisphosphonate takes effect. Although Dr Heath commented that oral etidronate was ineffective, it has prolonged the duration of remission after intravenous etidronate when given in a dose of 20 mg/kg/day¹⁴ and is probably worth trying when the acute episode of hypercalcaemia has been dealt with. Good control of hypercalcaemia in the long term may also be achieved, however, by intermittent bisphosphonate infusions on a day patient basis.¹²

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Prevalence and diagnosis of chronic respiratory symptoms

SIR,—Dr Peter Littlejohns and colleagues have reported a reduced prevalence of disability associated with chronic respiratory symptoms among patients in south west London compared with that in 1961.¹ The extent to which prevalence was reduced was, however, fairly small and in women was probably not significant (2.5% compared with 3% in 1961). The analysis did not take into account non-pulmonary causes of disabling breathlessness, including excess weight and "silent" ischaemic heart disease, so that the true prevalence of respiratory disability cannot be deduced from these findings. In conjunction with the national mortality and morbidity statistics Dr Littlejohns and colleagues interpreted the position as improving, but this may be wishful thinking.

Mortality in patients with chronic bronchitis, emphysema, asthma, and chronic airflow obstruction per 10,000 population aged 55-64, 1973-86

Among women aged 55-64 mortality in diseases associated with airflow limitation has increased over the past few years, and there seems to be an upward trend among men (figure). The position has deteriorated since 1981, when a report of the Royal College of Physicians made recommendations for management of what is mainly a preventable condition.¹ Unfortunately, a high proportion of the patients in greatest need do not receive specialist advice, and their treatment commonly leaves much to be desired.² In addition, Dr Littlejohns and colleagues' study showed a high proportion of undiagnosed cases.

As a profession we are having only limited success in treating this type of patient; we need to do more to bring such patients to treatment and to curb smoking, which remains the principal cause of their disability.

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Non-ionic versus ionic contrast media

SIR,—Minerva,¹ relying on the work of Eyes and Goldman,² asks why any patient undergoing urography should be exposed to the risks of the old method of urography using ionic contrast media.

Eyes and Goldman argue that by using a half dose of non-ionic contrast medium the cost is reduced by a half and the urogram is subjectively acceptable, but their work³ has been criticised⁴ and other authors studying longer series have found no reason to prefer non-ionic media⁵; sodium salts gave a slightly better urogram than non-ionic media.⁶ Non-ionic low osmolar media are supposed to be safer than ionic media but this has yet to be established by clinical trial. Indeed one trial has shown a greater number of delayed reactions to iopamidol than to iothalamate (Conray 320).⁷

Low osmolar media are so expensive (even in half doses) that they have been termed "liquid gold"⁸ and the cost of saving a life given reasonable assumptions is estimated at £500 000 to £1m,⁹ about 10 times the amount the NHS can afford for proved treatments with known effects.¹⁰ The concept of risk factors for predicting reactions to contrast media is seriously flawed as the incidence of important reactions, even in patients with so called risk factors, is extremely low⁷ and the relevance of most of them has not been tested in controlled trials. Nevertheless, up to one half of patients have such risk factors.¹⁰

The answer to Minerva's question is that low osmolar media are very expensive; though they are more comfortable for the patient, it has not been satisfactorily shown that they are safer in clinical use, and a technically better urogram results from using sodium salts of ionic media.

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Guidelines on HIV infection

SIR,—Last year two publications arrived on my doorstep on the same day. The first was a copy of the *BMA Guidelines for Doctors on HIV Infection*. The second was a copy of *New Scientist*, which carried the first report that a gene multiplication technique had identified the HIV genome in the blood of a person who was at risk for the disease 36 months before subsequent seroconversion. The guidelines for doctors were based on the stated assumption that the absence of HIV antibodies three months after an accident to a health worker was a reliable indication that infection had not occurred.

It is particularly unfortunate that Dr Jonathan A Shapiro's article, which aims at encouraging a positive attitude towards AIDS in health workers, should reach me alongside another copy of *New Scientist*, which reports a paper in the *New England Journal of Medicine* confirming that silent infection may persist for an uncertain number of years, certainly for more than four.¹

The BMA booklet is now clearly misleading and should be withdrawn immediately. It seems probable that HIV infection with a small number of virions in an otherwise healthy person usually leads to silent infection. The results of gene multiplication studies in a representative group of health workers are urgently needed.

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**The secretary writes: "Detection of HIV genetic material by DNA amplification (polymerase chain reaction) was first reported at the Stockholm conference in 1988 after the BMA guidelines had been published. The article in the *New England Journal of Medicine* contains several caveats, though, reporting positive results with the polymerase chain reaction in three men at up to 35 months before seroconversion and isolation of HIV in 27 in whom seroconversion was not observed at 28-36 months of follow up. The subjects were at high risk of sexual exposure to HIV, in contrast to direct inoculation of HIV, which seems to be more likely to lead to defined seroconversion events. Whether isolation of HIV or positive results by the polymerase chain reaction in the absence of seroconversion implies infection with an HIV strain capable of in vivo replication and pathogenesis has yet to be proved. The results cannot provide an estimate of the proportion of HIV infections that do not stimulate measurable antibody.

"Absolute certainty is rarely possible in medicine, and there is no unequivocal test for absence of HIV infection. We do not judge it necessary to modify our guidance at present. Health workers are not a high risk group for AIDS, and in the rare cases when accidental inoculation leads to HIV infection