Of 220 women in the practice who had had a hysterectomy, 59 (26.8%) were using or had used hormone replacement therapy in the 12 months before the study; 11 of these 59 women had started therapy because it had been recommended after their hysterectomy. These results confirm previous findings that oestrogens are underused in women who have had a hysterectomy[8,9] and suggest that this may be a result of lack of advice postoperatively.

Heavy or irregular bleeding was one of the most common reasons stated for discontinuing therapy (13.6% of 22 respondents) and was the most common reason for trying more than one preparation (16.0% of 50 respondents). Tibolone was used by 32 of 78 women with an intact uterus (41.0%) in order to avoid the return of cyclical bleeding. Women's concerns about problematic bleeding should be investigated further as these may influence the future use and development of hormone replacement therapy regimens.

Therapy had been discontinued by 22 respondents (16.1%) at the time of the study, clinic attenders and non-attenders being in similar proportions, suggesting that the clinic in this practice did not affect compliance with hormone replacement therapy. As long-term compliance with therapy is an important factor in the prevention of osteoporosis and cardiovascular disease,[10] the effects of such clinics on compliance warrants further study.

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Haemophilus influenzae vaccine: maximizing uptake

Sir,
In the context of recent controversy concerning the possible adverse effects of vaccination,[1] it is important to keep in mind the benefits of immunoprophylaxis. This year we have seen two children with *Haemophilus influenzae* type b (Hib) meningitis that could have been prevented by vaccination.

A child aged three years from a travelling family presented with rapid onset of fever, vomiting and a decreased level of consciousness. Despite full intensive care management, including vigorous colloid resuscitation and treatment with cefotaxime, steroids, mannitol and inotropes, the child declined inexorably and died within 24 hours of admission to hospital. Cerebrospinal fluid and blood cultures confirmed *H influenzae* type b as the causative organism; the child had not received Hib vaccination.

An infant aged five months presented with a short illness suggestive of bacterial meningitis; lumbar puncture confirmed the diagnosis, and *H influenzae* type b was subsequently cultured from the cerebrospinal fluid. Following stabilization and transfer to the regional paediatric intensive care unit, cranial computerized tomography was performed, revealing cerebritis, a unilateral subdural effusion and increased ventricular volume. He went on to develop recurrent seizures, and although he has survived the illness, severe neurological deficits have resulted. He had missed all routine primary vaccinations because of a succession of minor upper respiratory tract infections.

Following the introduction of the routine Hib conjugate vaccine programme in October 1992, 93% of infants in the United Kingdom have been vaccinated and the number of invasive *H influenzae* type b infections has fallen by more than 90%;[2] thus, we estimate that more than 50 deaths and 130 episodes of serious neurological sequelae are being prevented annually.[3]

Vaccination could have prevented both of the cases described. Although achieving high vaccination uptake is problematic in certain groups, such as travelling families, a directed approach has been demonstrated to be effective.[4] A health visitor can establish rapport with families, obtain consent from the mother (who is usually the prime decision maker) and administer vaccines in the family home. The second case highlights the dangers of postponing vaccination because of minor illness; Department of Health guidelines warn 'no child should be denied immunization without serious thought as to the consequences, both for the individual child and to the community'.[5]

Although epidemiological studies may throw up hypothetical risks of vaccination, as in a recent study suggesting a link between inflammatory bowel disease and measles vaccination,[1] the tangible benefits of preventing catastrophic illness should always be held firmly in mind.

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Warfarin in stroke prevention

Sir,
The stimulating review article by Sweeney and colleagues concerning the use of warfarin in non-rheumatic atrial fibrillation places a responsibility on general practitioners to consider seriously treatment of carefully selected patients.[1] I performed a baseline audit of patients with non-rheumatic atrial fibrillation in our group practice.

The practice comprises eight full-time partners and one part-time partner with a total list size of 14 300 (average list size 1700 for each partner) and is situated in a small market town. An anticoagulation service is organized in the practice with blood samples being sent to the district general hospital 15 miles away. The practice is fully computerized and paperless (Exeter system) with continuous archive facilities.

On 1 April 1995 computer analyses were performed searching for: patients

receiving regular prescriptions for digoxin, amiodarone, flecainide, verapamil or procainamide; patients with 'atrial' in their notes summary; patients with 'transient ischaemic attack' in their notes summary; and patients receiving regular prescriptions for warfarin or phenindione (Dindevan®, Goldshield).

From these data it was possible to define a group of patients with probable non-rheumatic atrial fibrillation and to determine their anticoagulation status. The groups with atrial fibrillation who were not receiving anticoagulation were further divided into three therapeutic groups as defined by Sweeney and colleagues:[1] patients aged less than 60 years with no complicating factors; patients aged less than 75 years without hypertension, congestive heart failure, thromboembolism or diabetes; and patients not in the two previous groups (the at risk group).

Each practice partner was given a list of patients in the at risk group and asked to decide, with the aid of patients' computer records, whether or not the patient was still in atrial fibrillation and if so whether to include or exclude the patient from being offered anticoagulation. Suggested reasons for exclusion included unsteady gait, tendency to falls, dementia, poor compliance, poor eyesight, excess alcohol consumption and active peptic ulceration (including maintenance on acid suppressing drugs).

Results revealed 224 patients with non-rheumatic atrial fibrillation (16 cases per 1000 patients) with an age range of 32–92 years and a mean age of 76.6 years. Of these 224 patients, 75 (33%) were receiving anticoagulation, with individual general practitioner rates ranging from 23% to 53%. Of the 149 patients not anticoagulated, six were aged less than 60 years with no complicating factors, 26 were aged less than 75 years with no additional risk factors and 117 were in the at risk group. Overall, practice partners included 59 of the 117 patients (50%) for consideration for anticoagulation, with inclusion rates for individual partners ranging from 17% to 86%.

This preliminary study indicates that with computerized records an audit of at risk patients is possible but this is time consuming (the audit took up to 20 hours of doctor time). The study produced a group of over 100 patients considered to be at risk and yet individual practitioner assessments as to which patients should be offered anticoagulation varied greatly despite having received the same suggested exclusion criteria. The resulting group of 59 eligible at risk patients would not all be expected to take up the offer of anticoagulation but even if half were to do so this would represent a substantial workload in terms of surgery time and practice nurse time.

Despite the commendable effort of Sweeney and colleagues to define an at risk group of patients, the variation in individual practitioner's decision making may still prove to be an insurmountable hurdle in the effort to deliver care to a group in need.

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Urban community hospitals

Sir,
In their letter (June *Journal,* p.326) Hamilton and Round came to conclusions about the potential usage of an urban community hospital which do not appear to have been supported by the results of their study. Having found that 53% of the local general practitioners said that they would probably use such a hospital (82% for respite care, 75% for social reasons, 79% for elderly acute medical patients, 77% for observation, assessment and simple investigation, 56% for early hospital discharges following surgery, 59% for terminal care, and 56% for early hospital medical discharges), the authors conclude that 'an urban community hospital would provide services not now available, rather than being an alternative to district general hospital admission'.

A different conclusion from their study could have been that about half of the local doctors said that they would use an urban community hospital for a wide range of patients, many of whom currently occupy beds inappropriately in the local district general hospital.

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Sir,
Cook agrees with the conclusion of our letter (June *Journal*, p.326) that an urban community hospital would generate a reduction in work for the local district general hospital. Where we do not agree is in the magnitude of the effect. We believe it would be small.

Admissions to community hospitals come from three main sources: early district general hospital discharges, direct admissions which would otherwise have gone to the district general hospital, or patients who would never have been sent to hospital at all. Our study shows general practitioner preference for this last group (respite care and social admissions), and least interest in the first group.

The rate of 'inappropriate' admissions to a district general hospital, usually quoted as around 15%, has always been hospital-defined, and is approximately halved when general practitioners' opinions are sought.[1] Such a false positive rate for emergency hospital admission of under 10% is excellent, especially when one considers the potential consequences of failing to admit a patient to hospital when admission is needed. The myth that there is a large pool of inappropriate admissions that can be redirected to a community hospital does not stand up to examination.

Nonetheless, an urban community hospital may still have a role — it was supported by 49% of general practitioners, in some cases strongly. It cannot be seen, however, as a quick-fix solution for rising medical admissions to district general hospitals.

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Clinical guidelines

Sir,
The paper by Conroy and Shannon (July *Journal*, p.371) was a masterly review of the pitfalls that await the implementation of clinical guidelines.

We recently conducted a critical review of clinical guidelines, assessing the evidence to see whether guidelines have had any statistically significant effect on the outcomes of patient conditions in primary care, as opposed to merely changing the process by which family doctors deliver care to their patients (Worrall G, Chaulk P. Hope or experience? A critical appraisal of the effects of clinical guidelines on patient outcomes in primary care, *J Fam Pract* 1995; under review). We