blems, incidence of psychological and social problems and investigation rate. This finding was also true after the changes. Two possible hypotheses might fit these facts: the more complex the problem, the longer it takes and the higher the incidence of investigation, referral and prescribing; and/or when the consultation lasts longer, more complex problems are discovered and dealt with.

Comparing the data before and after the increase in booking interval and decrease in list size, it was noticeable that: the prescribing rate was identical (45% of consultations); the examination rate was identical (74% of consultations); the rates of single and multiple problems were almost identical; the total referral rate fell slightly, but probably not significantly, from 13.0% to 11.5%). This would support the hypothesis that for a given general practitioner in the same or similar population these variables are highly dependent on the doctor.

There were some differences, however, before and after: the proportion of consultations in which there were preventive care activities rose from 14% to 22% of consultations; the proportion of consultations in which current or chronic problems were reviewed increased from 34% to 50%; the proportion of consultations involving psychological and social problems increased from 13% to 19%. These three items are all areas in which I am extremely interested and this may have affected the patients' choice of which doctor to stay with. A doctor with different motivation might see different consequences from a fall in list size. However, if we feel that prevention, continuing care for chronic diseases, and offering more help for psychological and social problems are worthwhile aims, my experience would tend to support the claims that fall in average list size and increase in available consultation time would help achieve this.

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No endocervical cells: an update

Sir,
Thanks to your publication of my letter on this subject (January *Journal*, p.40), I have now received some advice on the matter of endocervical cells which I wish to convey to other readers. A statement by the British Society for Clinical Cytology and the British Society for Colposcopy and Cervical Pathology dated June 1989 states:

'One of the factors determining the efficiency of the national programme for the prevention of cervical cancer is the quality of the smears. The best results in the detection of pre-cancerous changes in the cervix depend upon adequate sampling of the transformation zone.

'The transformation zone is the area of cervical mucosa originally lined by columnar epithelium in which metaplasia occurs, transforming the columnar cells into squamous epithelium. It lies adjacent to the squamous epithelium of the ectocervix at its external margin and adjacent to the columnar cells of the endocervix at its internal margin. Hence both metaplastic squamous cells and columnar cells will be derived from samples taken from this area.

'To the microscopist examining the smear the only indication that the transformation zone has been sampled is the presence of both of these types of cell. However, the presence of columnar cells is not sufficient evidence that the upper margin of the transformation zone has been sampled, and metaplastic cells are not always sufficiently distinctive to allow reliable identification under the microscope.' Thus states the report: 'It is unwise to rely on the presence of metaplastic cells or endocervical cells as evidence of sampling of the transformation zone.'

The assessment of the adequacy of a cervical smear thus remains subjective. Clearly there will be those smears which contain an insufficient quantity of epithelial cells and those samples in which the epithelial cells are obscured by blood or inflammatory cells, which will remain unsatisfactory and will need to be repeated. The laboratory should make it clear which smears these are. However, those smears which are otherwise quite satisfactory but do not contain endocervical cells can be recalled in the normal time interval. Although there is some suggestion that the chance of missing an epithelial abnormality is increased in smears without endocervical cells[1] there is also evidence that pre-invasive cancer can be detected just as efficiently from smears without endocervical cells.[2,3]

The onus therefore, quite justifiably rests with the person taking the smear. It is essential to be able to clearly visualize the cervix, take a good sample through 360 degrees and to transfer the sample to a slide and fix it properly. The medical defence bodies have also voiced their support of their members who adopt this approach.

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References

1. Elias A, Linthorst G, Bekker B, Vooijs GP. The significance of endocervical cells in the diagnosis of cervical epithelial changes. *Acta Cytol (Baltimore)* 1983; **27**: 225-229.
2. Koss LG. Standards of adequacy of cytological examination of the female genital tract. In: *Diagnostic cytology and its histopathological bases.* Volume 2. 3rd edition. Philadelphia: JB Lippincott, 1979: 1173.
3. Beilby JOW, Bourne R, Guillebaud J, Steele ST. Paired cervical smears: a method of reducing the false negative rate in population screening. *Obstet Gynecol* 1982; **60**: 46-48.

Lyme disease

Sir,
Dr Nathwani and his colleagues have produced an excellent review of Lyme disease (February *Journal*, p.72). Their statement that the diagnosis is often missed by general practitioners is true, although it is our experience that it may also be overlooked by specialists in a variety of fields.[1] Once witnessed, the dramatic response of Lyme disease to antibiotics is never forgotten, and we now have a number of cases of clinical Lyme disease in our relatively small rural practice.

It is worth pointing out that endemic areas of Lyme disease in the UK may be much more widespread than was once thought, and that in such areas, the rate of seropositivity far exceeds the incidence of clinical disease. This complicates the interpretation of serology in symptomatic patients, especially when groups such as dairy farmers show a level of seropositivity of up to 15%.[2] We would entirely agree with Dr Nathwani and his colleagues that there should be increased awareness of this diagnosis by the public, general practitioners and specialists.

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References

1. Bourke S, Baird AG, Bone FJ, *et al.* Lyme disease with acute purulent meningitis. *Br Med J* 1988; **297**: 460.
2. Baird AG, Gillies JCM, Bone FJ, *et al.* Prevalence of antibody indicating Lyme disease in farmers in Wigtownshire. *Br Med J* 1989; **299**: 836-837.

Age-band prevalence rates of long-term benzodiazepine users

Sir,
In a recent paper Simpson and colleagues (January *Journal*, p.22) identified a total

of 445 patients who had received three or more consecutive prescriptions for one or more benzodiazepines from a practice population of 17 000 patients from three general practices.

The article illustrated the percentage age distribution for a sample of 205 of the benzodiazepine users. The age bands 60–69 years and 70–79 years contained the largest proportions of benzodiazepine users, approximately 30% and 26% respectively. However, this method of presenting such data fails to provide adequate information on the prevalence rate of different age groups. Table 1 shows the prevalence rate for each age band based on the total sample of 445 benzodiazepine users.

Table 1. Age band prevalence rates of long-term benzodiazepine users.

Age (years)	Number of benzodiazepine users per 1000 population
20–29	1
30–39	10
40–49	26
50–59	37
60–69	81
70–79	121
80–89	125
90+	29

This analysis reveals that the age band with the highest prevalence of benzodiazepine users is the 80–89 years age group. However, the 80–89 years age group accounted for only 11% of the 445 benzodiazepine users. The 60–69 and 70–79 years age groups also have relatively high prevalence rates of 8.1% and 12.1% respectively. This further emphasizes that the older age groups are relatively heavy users of benzodiazepines in relation to their representation in the general population.

Rodrigo and colleagues' reported prevalence rate of 2.2% of registered patients receiving prescriptions for benzodiazepines for more than one year and Simpson and colleagues' figure of 2.6% mask the extreme variability of prevalence rates within specific age bands. Future studies should pay more attention to prevalence rates for specific age bands.

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Reference

1. Rodrigo EK, King MB, Williams P. Health of long-term benzodiazepine users. *Br Med J* 1988; **296**: 603-606.

Traveller gypsies

Sir,
I am grateful to Allison Streetly for drawing attention to the outbreak of polio among travellers in the mid-1970s (letters, February *Journal*, p.83). I too cannot imagine that travellers have lower rates of infectious illness than the settled population and, as I wrote in my review (October *Journal*, p.425), a low immunization rate is still an important issue for travellers' health care.

Dr Streetly takes me to task for making 'little of the differences in culture and perspective . . . between travellers and health care providers'. This is surprising because I intended that argument to be one of the recurrent themes of the article. I discuss how recognition of traveller gypsies as an ethnic group may lead to a better understanding of their own perception of prevention and the role of health services. I also state that the most interesting development in traveller health care is the adoption of a patient centred approach starting from the concerns and problems of the travellers themselves. I stress that travellers' health visitors can help negotiate some of the cultural differences between doctors and their traveller patients, who often have their own concepts of hygiene and illness. Finally, I suggest that any health or preventive initiative should be based on close consultation with the local traveller communities, who are best placed to identify specific problems.

I fully agree with Dr Streetly that we should try to understand the health service from the 'outside in'. To this end our research programme in east London includes an investigation of travellers' own health priorities and their view of preventive procedures and health care facilities.

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Referrals by optometrists to general practitioners

Sir,
Dr Perkins concludes that general practitioners remain an effective filter between optometrists and ophthalmologists (February *Journal*, p.59). While this may have been the case during his study, I wonder if it will continue to apply following the restriction on the availability of free sight tests.

When seeing patients under general ophthalmic services ophthalmic opticians and ophthalmic medical practitioners are obliged to refer any abnormal findings to the patient's general practitioner. This leads to an unnecessary number of patients being referred to their doctor as the examiner is unable to exercise his or her judgement. The general practitioner assesses the situation, and, as Dr Perkins has shown, a sizeable proportion of patients do not need further referral.

Since last April the entitlement to a general ophthalmic services examination has been restricted, and many people now have to pay for private examinations. The examiner is then under no contractual obligation to inform the patient's general practitioner of any findings. Obviously, the ophthalmic optician or ophthalmic medical practitioner may not know of all the relevant background information about a patient, but they could avoid sending patients with cataracts, for example, unnecessarily early to their doctor and could suggest over the counter treatment for cases such as dry eyes. If this study were to be repeated in a couple of years' time I think it likely that fewer patients would be referred to their general practitioner, and the 'filtering' would be less apparent.

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Near patient testing is within reach

Sir,
I congratulate Dr Hilton for the foresight of his review article on near patient testing (January *Journal*, p.32). What computers have done to improve patient care in general practice in the 1980s, near patient diagnostics will do to improve care in the 1990s.

Even before the advent of the white paper[1] there was an argument for producing quicker comprehensive biochemical screening to give a speedier diagnosis, to give earlier treatment and reduce the number of patient visits. Dr Hilton's example of the benefit of glucose assays in diabetic clinics points to how useful a full biochemical screen would be for a wider range of patients.

My interest is in the Du Pont Analyst which has the advantage of performing up to 16 chemistries simultaneously on a single sample in around 10 minutes, and