whether any otorrhoea had occurred. No attempt was made to correlate the otorrhoea to swimming activity or upper respiratory infection.

We studied 210 children (mean age 6 years). At the beginning of the summer the tubes had been in place for a mean of six months (range one to 24 months). Purulent discharge developed in 40 patients, 20 of whom had not been swimming. The incidence of otorrhoea was lower in the 142 children who had swum during the summer (13%) than in the 68 children who had not (31%) ($p=0{\cdot}005$, χ^2 test). The incidence of infection in the group who had not swum was not significantly different from that in the 27 children who had swum one to five times (33%) but was significantly higher than that in the 41 children who had gone swimming six to 20 times (12%, $p=0{\cdot}01$) and in the 71 children who had gone swimming more than 20 times (7%, $p<0{\cdot}001$).

Our conclusions are the same as those of Pringle[1]: children with grommets should be allowed to swim. Penetration of water into the ear canal is not the main factor leading to otorrhoea in patients with grommets.

MARTINE FRANÇOIS
PIERRE BENZEKRI

Hôpital Robert Debré,
75019 Paris,
France

JEAN NOEL MARGO

50700 Valognes,
France

PATRICK JAQUEMIN

Clinique Emile Roux,
16021 Angoulême,
France

PHILIPPE BORDURE

Hotel Dieu de Nantes,
44035 Nantes Cedex,
France

1 Pringle MB. Swimming and grommets, children with grommets should be allowed to swim. *BMJ* 1992;**304**:198. (25 January.)
2 Lounsbury BF. Swimming unprotected with long-shafted middle ear ventilation tuber. *Laryngoscope* 1985;**95**:340-3.
3 Chapman DF. Swimming and grommets. *Clin Otolaryngol* 1980; 5:420.
4 Smelt GJC, Yeoh LH. Swimming and grommets. *J Laryngol Otol* 1984;**98**:243-5.

Measles, mumps, and rubella vaccination

SIR,—Notification of measles in Somerset has progressively declined from 568 cases in 1988 to 65 cases last year. Our immunisation rate for measles is currently 96%.

During the first eight weeks of 1992 there were 69 notified cases, of which 17 were in people who had been immunised. Of particular interest is the change in the age distribution (table), which has shifted towards a group that has historically lower immunisation rates: the measles immunisation rate for the cohort born in 1980 in Somerset is 79%. This shift is occurring elsewhere in the United Kingdom (H Carter and D Gorman, personal communication).

Number (percentage) of cases of measles by age in 1989 and first eight weeks of 1992

	Age (years)			
	0-4	5-9	10-14	≥15
1989	72 (51)	37 (26)	16 (11)	17 (12)
1992 (first 8 weeks)	24 (35)	18 (26)	22 (32)	5 (7)

This could be overcome by a two stage immunisation regimen for measles, mumps, and rubella for all children, with the second dose replacing the current rubella immunisation for teenage girls, as Harden Carter and Dermot Gorman suggest.[1] This is routine in Scandinavia,[2] has been recommended in the United States,[3] and has been suggested previously in the United Kingdom.[4] The matter needs to be reconsidered urgently by the Joint Committee on Vaccination and Immunisation.

A HILL

Somerset Health Authority,
Taunton,
Somerset TA2 7PQ

1 Carter H, Gorman D. Measles, mumps, and rubella vaccine: time for a two stage policy. *BMJ* 1992;**304**:637. (7 March.)
2 Christenson B, Böttiger M, Heller L. Mass-vaccination programme aimed at eradicating measles, mumps, and rubella in Sweden: first experience. *BMJ* 1983;**287**:389-91.
3 Measles, United States, 1988. *MMWR* 1989;**38**:601-5.
4 Isaacs D, Menser M. Measles, mumps, rubella and varicella. *Lancet* 1990;**335**:1384-7.

Transvaginal ultrasonography

SIR,—R K Goswamy's editorial on the usefulness of transvaginal ultrasonography clearly and simply outlined the advantages of transvaginal scanning.[1] Several points, however, require clarification.

Firstly, transvaginal scanning should be used as a supplementary procedure after an initial transabdominal survey of the pelvis. Because of the inaccuracy of digital examination it is crucial to survey the area from the umbilicus to the symphysis pubis and laterally to both flanks. This survey cannot be completed with a high frequency (5·0-7·5 MHz) transvaginal probe because of the lack of penetration and small footplate.

Secondly, the limited field of view with transvaginal probes (*a*) cannot accommodate longitudinal measurements of the uterus, which are often needed for baseline and follow up studies; (*b*) means that large masses cannot be viewed; and (*c*) does not permit assessment of associated pathology—for example, liver metastases, ascites, lymphadenopathy, and hydronephrosis.

Thirdly, occasionally ovaries are sited high in the pelvis and cannot be viewed transvaginally.

Fourthly, acceptability to patients, especially elderly people, virgins, and people from ethnic groups, must be considered.

Most importantly, I wish to raise the issue of gynaecologists having a transvaginal scanner in their consulting rooms. Ultrasonography requires detailed academic and practical training. Subtle differences in echo patterns can be recognised only after hours of practical experience. Scanning is three dimensional, and not everyone can master the skill necessary for that. I do not believe that gynaecologists could dedicate time to learn this special technique in their overstretched schedules. In NHS hospitals it seems unrealistic, even if doctors have the ability, to expect them to perform routine scanning within clinics. Though I agree that transvaginal scanning is important in the management of ectopic pregnancies, I find it worrying that Goswamy should suggest that a laparoscopy should be performed on the basis of a negative finding by an inexperienced operator. The skills of an experienced sonographer must never be underestimated.

How much knowledge about the safety of ultrasound does a gynaecologist possess? A large part of the qualification in ultrasonography is concerned with the physics and the safety aspects of ultrasound. It is essential to minimise exposure to ultrasound and, hence, the potential hazard. Students must be closely supervised so that correct settings for power, overall gain, time gain compensation, and processing are selected. Equipment must be tested and quality assured regularly. Owing to the high power levels during Doppler studies (especially transvaginally, when the probe is close to the organs and possibly a developing fetus), cavitation, non-linear propagation, thermal effects, microstreaming, and radiation pressure can occur. Inexperienced operators should not dabble in this work. Doppler must be used only when the result of the study will be of clear benefit to the patient.

Finally, the latest view is that ovarian screening is not cost effective or successful (study day of British Medical Ultrasound Society, London, October 1991).

VERONICA GREEN

Guy's Hospital,
London SE1 9RT

1 Goswamy RK. Transvaginal ultrasonography. *BMJ* 1992;**304**: 331-2. (8 February.)

Diagnosing bronchioloalveolar carcinoma

SIR,—In their paper on the relation of bronchioloalveolar carcinoma to tobacco Alfredo Morabia and Ernst L Wynder underestimate the problem of distinguishing these tumours from other forms of adenocarcinoma.[1] They argue that the frequency of histological misclassification of these tumours is so small as to be insignificant as a source of error in their study. In fact this histological diagnosis can rarely be made with complete certainty as the same pattern can be seen in metastatic adenocarcinoma in the lung (particularly pancreatic carcinoma)[2] and at the periphery of conventional primary adenocarcinomas of the lung.[3]

F G MAYALL

Department of Pathology,
University Hospital of Wales,
Cardiff CF4 4XN

1 Morabia A, Wynder EL. Relation of bronchioloalveolar carcinoma to tobacco. *BMJ* 1992;**304**:541-3. (29 February.)
2 Rosenblatt MB, Lisa JR, Collier F. Primary and metastatic bronchioloalveolar carcinoma. *Diseases of the Chest* 1967;**52**: 147-52.
3 Bennett DE, Sasser WF. Bronchiolar carcinoma. A valid clinicopathologic entity? A study of 30 cases. *Cancer* 1969;**24**:876-87.

Underreporting of pedestrian accidents

SIR,—David Teanby has calculated that pedestrian accidents are underreported by 16% in the United Kingdom.[1] Figures from a comprehensive survey that Kjellstrom and I carried out in Auckland, New Zealand, over 10 years, showed that reporting ratios for pedestrian accidents decreased from 75% to 48%, with a similar decrease in underreporting of injured car drivers and passengers.[2] This decrease in reporting of accidents by police was partly explained by a decrease in the number of traffic police from six officers per 10 000 cars in 1975 to five per 10 000 in 1982.

A breakdown of the figures for preschool children (age 0-4 years) showed that 77% of accidents that occurred on roads were reported but only 3% of those that occurred off the road were reported (for example, a parent backing a car over a child in the driveway or a car rolling down a slope because the handbrake had not been applied). Figures for cyclists were greatly underreported (20% in 1975, decreasing to 15% in 1982).

These ratios correlated well with figures from Sweden, Denmark, and the United Kingdom. Our conclusions were that police accident figures (with the exception of figures on fatal accidents) were unreliable as many accidents were not attended by the police even when serious injury had been inflicted. The likelihood of police reporting an accident clearly depends on the type of accident: there is no legal obligation to report some accidents, and people attending to victims rarely report the accident to the police. Often the people involved may not be aware who is responsible for reporting the accident, and if they are they may not want the police to be involved.

Central registration of accidents with a merging of statistics compiled by the Ministry of Transport

and the Department of Health with accident compensation statistics is clearly necessary if adequate data are to be used in preventing accidents.

PATRICK J MORRISON

Department of Medical Genetics,
Queen's University of Belfast,
Belfast City Hospital,
Belfast BT9 7AB

1 Teanby D. Underreporting of pedestrian road accidents. *BMJ* 1992;**304**:422. (15 February.)
2 Morrison PJ, Kjellstrom T. A comparison of hospital admissions data and official government statistics of serious traffic accident injuries. *NZ Med J* 1987;**100**:517-20.

Home visits by psychiatrists

SIR,—Christine Hardy-Thompson and colleagues report general practitioners' views on psychogeriatric domiciliary consultations.[1] We recently submitted for publication a report of a study evaluating the cost of psychiatric outpatient consultations and what the costs of home consultations would be if all such outpatients were seen at home. The cost of psychiatric outpatient consultations in England for 1989 was estimated as £205 882 529 and that for home consultations as £215 326 723. The main reason for the costs being similar despite the extra time spent travelling for home visits was the high non-attendance rate (up to 38%[2]) in the outpatient clinic.

Assessing patients at home has several advantages. The consultation rate is almost 100%. The patient's home environment can be observed at first hand rather than information on it obtained from the patient or an informant at the clinic. Unnecessary social work and occupational therapy assessments, which may otherwise be requested by the outpatient clinic are avoided. The psychiatrist has ready access to the patient's medication, which is often not brought to the clinic. This draws attention to polypharmacy, poor compliance, possible interaction with non-psychotropic drugs, hoarding for overdose, and dependence on benzodiazepines. The stigma of attending a psychiatric clinic is reduced.

Given these advantages and that home consultations are only marginally more expensive than outpatient consultations, we should be looking at placing greater emphasis on home consultations. Some psychogeriatric services have almost done away with outpatient clinics in favour of home visits. This to some extent will reduce the importance of the indications for domiciliary consultations.

AJIT SHAH

Section of Epidemiology and General Practice,
Institute of Psychiatry,
London SE5 8AF

1 Hardy-Thompson C, Orrell MW, Bergmann K. Evaluating a psychogeriatric domiciliary visit service: views of general practitioners. *BMJ* 1992;**304**:421-2. (15 February.)
2 Shah AK, Lynch S. The characteristics of patients attending a psychiatric follow-up clinic. *Psychiatric Bulletin* 1990;**14**: 153-4.

Fundamental principles of the NHS

SIR,—A consensus is now emerging that general practitioners can be effective commissioners of secondary care, and there is concern as to how the commissioning role can be efficiently extended to the whole of general practice. The fact is that fundholders in general practice, by redefining their relationship with their consultant colleagues, exploiting the flexibility that their small volumes of work allow them, and combining their knowledge of patients' needs with their knowledge of providers' capabilities, can be more effective commissioners of care than health authorities.

With further expansion of the fundholding scheme several serious issues need considering. How can contractors cope with multiple purchasers? Is the increased management cost justified? How will family health services authorities and regional health authorities effectively monitor an expanded scheme? Will all practices perform efficiently as commissioners of care? What will the effect be on district health authorities and purchasing consortiums? How can general practitioners' purchasing plans be integrated within the strategic framework developed by health authorities? What is the role of the general practitioner to be?

These questions are complex, and the profession needs to develop answers as, no matter what the political environment, the issues will remain. Fundholding has shown that general practitioners, acting as the patients' agent, can deliver an improved service. How can this be spread to the rest of our colleagues?

The stark choice facing us is between rationing by restricting the range of services provided by the NHS or improving the efficiency of the service, as J B L Howell points out.[1] We should all consider how those efficiency gains can be achieved.

N H L STAREY

Burnham Surgery,
Burnham on Crouch,
Essex CM0 8SJ

1 Howell JBL. Re-examining the fundamental principles of the NHS. *BMJ* 1992;**304**:297-9. (1 February.)

SIR,—Disconcertingly, in J B L Howell's article[1] the duties of the minister of health specified in the NHS Act of 1946 tailed off into a row of dots just before the word "rehabilitation" occurred in the original. Sir Donald Acheson has recently reminded us that Beveridge's three legged stool of the NHS specified prevention, treatment, and rehabilitation. It is surely a fundamental principle of three legged stools that the shorter one leg gets in comparison with the others, the more uncomfortable the stool becomes. There is a great deal of catching up to be done in the development of our rehabilitation services before we can claim to be back in alignment with the fundamental principles of the NHS.

D L McLELLAN

Rehabilitation Research Unit,
University of Southampton,
Southampton SO9 4XY

1 Howell JBL. Re-examining the fundamental principles of the NHS. *BMJ* 1992;**304**:277-9. (1 February.)

Prescribing at the hospital-general practice interface

SIR,—My recent research leads me to concur with Roger Jones and Michael Rawlins that communication is singularly important for quality of care at the interface between hospitals and general practitioners.[1]

I conducted qualitative research, interviewing 21 general practitioners from nine local non-fundholding practices. My objective was to identify the real concerns of general practitioners with regard to prescribing issues at the interface. My findings in order of importance as perceived by general practitioners are as follows.

Firstly, the promptness and quality of communication from hospitals to general practitioners about prescribing was criticised. Though patients received seven days' supply of drugs on discharge, they often attended the surgery well within this time to request continuation of treatment. Thus in many cases the general practitioner was being asked to prescribe without adequate information. The clarity and amount of information were said to need attention. General practitioners wanted to know the intended duration of treatment and the reasons for interventions.

Secondly, the interviewees were concerned that clinical responsibility was unclear. Views varied widely, including, "The hospital should provide the general practitioner with information to prescribe complex drug regimens" and, "The hospital must share clinical responsibility if the general practitioner prescribes for the hospital."

Thirdly, there was a general feeling that it was unfair to levy a prescription charge for two weeks' treatment. Some "more experienced" patients go direct from the outpatient department to the general practitioner, knowing that they may obtain one month's supply.

Fourthly, loss leaders to the hospital service were frequently mentioned, though this was considered comparatively less contentious.

Fifthly, the general practitioners often mentioned that an intervention in treatment while the patient was in hospital had not been explained to them.

Finally, some of the general practitioners considered that the system of returning patients' own drugs, taken into hospital for a drug history, was not working adequately, leading to potential wastage.

These concerns are now being addressed locally; I believe that general practitioners in other areas may have similar concerns. I thus recommend that those concerned in compiling hospital drug protocols should involve local general practitioners both through liaison committees and by a direct personal approach. Patients should be informed of the communication process and its timescale.

I believe that the recent NHS reforms and an executive letter[2,3] now give us the opportunity to improve the quality of care across the interface between hospitals and general practitioners. There is no need to wait for any merging of district health authorities and family health services authorities or changes allowing virement between budgets before starting initiatives.

R DAVIES

Wrexham Maelor Hospital,
Wrexham,
Clwyd LL13 7TD

1 Jones R, Rawlins MD. Prescribing at the interface between hospitals and general practitioners. *BMJ* 1992;**304**:4-5. (4 January.)
2 NHS Management Executive. *Responsibility for prescribing between hospitals and GPs*. London: Department of Health, 1991. (EL(91)127.)
3 Welsh Office. *Responsibility for prescribing between hospitals and GPs*. Cardiff: Welsh Office, 1991. (WHC(91)94.)

One car down

SIR,—R S Bhopal's article on car ownership was thoughtful and provocative,[1] but its focus was on what individuals can do by and for themselves. Another set of questions must be asked about what health authorities, NHS trusts, and directly managed provider units could do to discourage unnecessary car use and so contribute to a greener NHS.

Possible ways to discourage use of cars include (1) increasing cycle mileage rates to near those for cars. This would encourage staff to use cycles for work by allowing them to make a small profit. (2) Giving free on site car parking spaces to staff (regardless of status) only if they need to use their car during working time. Many hospitals automatically give consultants free car parking spaces when they need their car only for travel to and from work. (3) Where on site car parking is charged for, to do so on the basis of engine size. (4) Providing secure cycle racks at the expense of car parking spaces. (5) Giving loans for public