Data obtained from 230 antenatal clinics on their current approach concerning toxoplasmosis

	No of clinics
Advice and information given:	
On listeriaosis and salmonellosis	198
On toxoplasmosis	136
Policies:	
Existing policy on screening	32
Change of approach in past year	108
Issue of screening raised	97
Women screened:	
Routinely	5
On request	219
If cat owners	51
When flu-like symptoms reported	104

advice, policies (written or unwritten), and screening for toxoplasmosis. These indicate that toxoplasmosis is actively considered in antenatal clinics but that practice varies widely and that consumer led, ad hoc screening occurs.

The survey sought information about senior midwives' knowledge of further diagnosis, treatment, and follow up of women with toxoplasma infection during pregnancy or during the baby's first year. Altogether 110 respondents did not know whether action would be taken in the event of the infection being diagnosed; 113 did not know what action would be taken. Only 110 were aware that babies born to women with a current infection would warrant investigation and follow up. One hundred and fifty two were satisfied with advice given concerning toxoplasmosis.

This survey indicates the lack of a coherent clinical approach to toxoplasmosis in pregnancy. It highlights potential gaps in the knowledge of an important group of health professionals (midwives). The Toxoplasmosis Trust considers that this matter should be addressed urgently by the production of guidelines recommending best practice. Finally, the findings highlight the ad hoc nature of current screening policy and the need for a multicentre study on the incidence of toxoplasmosis in pregnancy to obtain the data necessary to unify clinics' approach.

I thank PPP Medical Trust for supporting this project.

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Screening for cervical intraepithelial neoplasia

EDITOR,—J Elizabeth Macgregor and colleagues show that the incidence of invasive cervical cancer fell sharply in women aged 40-69 who had been well screened and had had the opportunity of repeat screening.[1] Screening was associated with a tendency to present at an earlier stage. Though their evidence clearly shows that treatment of cervical intraepithelial neoplasia influences the course of the disease, their attribution of the changes in the population incidence and mortality due to cervical cancer to the screening oversimplifies the matter.

They acknowledge that, as has been recognised for some time,[2] cohort effects are seen in the incidence of cervical cancer. Data from the Yorkshire Cancer Registry suggest that women who were aged 40-60 during 1968-79 were members of a cohort with a high incidence.[3] Women who are currently aged 40-60 include members of a cohort with a lower incidence. A rising incidence of invasive cervical cancer in women under 40 is also seen in the Yorkshire data and suggests that a new cohort of women with a higher incidence is coming through.

The difference in incidence between cohorts probably reflects the sexual behaviour of these women in their late teens and 20s. Popular history describes a freer pattern of sexual behaviour during the second world war. This is corroborated objectively by a doubling in the proportion of children born outside marriage during that period.[4] Behaviour then reverted to a more restricted pattern, and the proportion of births outside marriage fell. Women whose early adulthood occurred in this period are members of the cohort with a lower incidence. The changes in behaviour from the 1960s onwards are, as Macgregor and colleagues point out, associated with an increased incidence of cervical cancer. That statistics on births outside marriage indicate behaviour associated with a relatively high incidence of cervical cancer is supported by the international comparative data in the table.

International data on births outside marriage and incidence of cervical cancer

Country	Births outside marriage, 1970 (%)	Incidence of cervical cancer 1979-82 (cases/100 000 population)
United Kingdom	8·0	13·5
Denmark	11·0	18·5
France	6·9	14·3*
West Germany	7·2	13·9
Netherlands	2·1	7·6
Spain	1·4	5·9*

Data from references 3 and 4.
Spearman correlation coefficient 0·8857, P=0·05.
*Mean of figures from two cancer registries.

Macgregor and colleagues refer to "a concomitant rise in preinvasive disease," but they provide no data on its age distribution. The data from Yorkshire region show a slightly skewed distribution, with a model age at 30.[3] If this pattern is reflected in north east Scotland then the increase in the incidence of invasive disease in younger women seems to be occurring despite the increase in the detection of preinvasive disease. The contribution of screening programmes to the epidemiology of cervical cancer at the present level of service provision and uptake still remains uncertain.

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Schizophrenia among residents of hostels for homeless people

EDITOR,—Jim Connelly and Rhys Williams suggest that our finding of a lower prevalence of schizophrenia among homeless people resident in hostels in 1992 than in 1966 is explained by selection bias.[1,2] As we explained in our paper, the aim of sampling in 1992, as in 1966, was to produce a representative sample of people living in hostels for the homeless in Edinburgh. The provision of hostels has changed over the past three decades, with a considerable reduction in the number of places in direct access hostels.[3] We thought it possible that the prevalence of schizophrenia would differ according to the type of hostel, and we therefore classified hostels into two types according to whether they were most like or least like the hostels in 1966. Connelly and Williams seem to assume not only that it was invalid for us to include some hostels in our survey but also that the prevalence of schizophrenia differed substantially between the two types of hostel. The prevalence of schizophrenia in our study was similar in the two types of hostel (7/72 (10%) in the most comparable and 5/64 (8%) in the least comparable).

We reported our findings as objectively and cautiously as possible, and, as Connelly and Williams concede, we discussed the study's shortcomings. We could have emphasised the lower prevalence of schizophrenia much more in our discussion, but we chose to err on the side of caution. Connelly and Williams worry that our findings may be misrepresented. We hope that policymakers will be able to discern the strengths and weaknesses of the study themselves.

We are grateful to Connelly and Williams for finding an error in the table of our paper. Ninety seven (49%) of the 198 people in the sample studied in 1992 were resident in the most comparable hostels, and diagnostic assessments were performed on 72 of these subjects. This error does not affect any of the analyses or conclusions.

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Skill mix in primary care

EDITOR,—Iona Heath emphasises that decisions on changes in skill mix should be driven by needs and not costs.[1] At a time when demand for services is outstripping supply, however, an eye to costs is wise. The rapid development of the role of practice nurses was spurred by the availability of finance (reimbursement of 70% of the salary costs; the nurses perform fee for service tasks; and reimbursement for health promotion work) at least as much as by patients' needs. Practice nurses have been shown to be effective and popular with patients. Whether they are cost effective, however, is another matter.

Heath mentions that nurse practitioners in Burlington, Canada, saw only half as many patients as doctors and that Stillwell saw patients at 20 minute intervals. In a study by Fallon *et al* in Glasgow,[2] where walk in clinics were held by nurses, the consultation time available was 15 minutes per patient in the mornings and 21 minutes per patient in the afternoon (4·1 consultations per hour in the morning and 2·9

consultations per hour in the afternoon). By contrast, the potential consultation time for one of the doctors who held walk in surgeries was eight minutes per patient.[3] The nurses' fee for service work earned about one third of the salary costs borne by the practice.[2] Most of the tasks that the nurses carried out were simple, such as changing dressings, taking blood pressure, and testing urine; some of them could be delegated to staff who were not nurses, freeing resources for more difficult work such as giving advice on health. Mark R Williamson has argued that venepuncture should be delegated to receptionists.[4] In the study by Fallon *et al* 9·2% of tasks were venepuncture. Delegating this task would free substantial time.

Fallon *et al*'s study supports the argument for rethinking skill mix in primary care, offers the hypothesis that nurses are popular with patients because they have more time than doctors to spend with patients, and provides further data on the relative costs in relation to consultations undertaken. Policymakers cannot assume that changing skill mix will save money as the advent of practice nurses has shown. With a massive iceberg of unmet need in the population,[5] changing the skill mix is a way of providing a broader and more appropriate range of services, of freeing highly trained staff for the most demanding tasks, and of enriching the work experience of those who accept the delegated work.

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Database on clinical negligence

EDITOR,—Little interest has been shown in the steps that the Department of Health is taking to set up a central fund to spread the burden of indemnity payments and legal costs borne by trusts in connection with damage done by clinical negligence. Eventually, as the availability of legal aid becomes increasingly restricted, only the very poor and the very rich will be able to afford to take action in respect of clinical negligence. But trusts will have to bear the burden of past years for some time yet: claims will continue to arise from decisions made and actions taken since April 1991.

Another consideration is much more important than that of spreading the financial burden. When Mrs Bottomley's predecessor destroyed the mechanism operated by the defence organisations for spreading that burden in the hospital and community services he also destroyed the mechanism for collecting, analysing, and retrieving data on damage done by medical negligence in those services. Risk management is probably the only way of lessening the toll of medical negligence; to be effective it requires the formation and preservation of such a database. The defence organisations do their best with information from past years and from private and general practice, but they no longer have access to the vast fund of experience gained in the hospital and community services.

I hope that the department will combine the institution of a central fund with the creation of a central collection agency that would store and analyse records of clinical negligence in the hospital and community services. The present arrangements for dealing with claims in respect of clinical negligence are sadly defective; they are damaging to patients and clinicians and are of benefit principally to lawyers. The benefit of risk management would be greatly enhanced by the institution of a central store of information about this continuing problem.

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Hospital vocational training

Local audits are helpful

EDITOR,—As a general practitioner, course organiser, and former senior house officer in Wessex, I am keenly aware of the problems in training for senior house officers.[1,2] Paul Little's survey provides an overview of the situation in Wessex but hides the variation among hospitals and posts.[1] Since the senior house officers who were questioned were in post it has become regional policy for course organisers in general practice to review hospital vocational training.

In Portsmouth we send a questionnaire to all senior house officers on vocational training schemes in the final month of each of their posts. Anecdotal reports about a post may be misleading as they may reflect a poor senior house officer or a poor post. Cumulative data from a series of senior house officers in post provide a better base from which to argue for improvements.

In Portsmouth all doctors on general practice vocational training schemes spend two months in general practice before their hospital training and 10 months in general practice after it; as Little mentions, a quarter (four) of our hospital posts are three months long. Ten of the 12 senior house officers in post replied to our questionnaire in February this year. All stated that they received weekly teaching, and seven thought that it was relevant to general practice. They were not asked the standard of teaching or degree of relevance. Only half had applied for study leave, but all the applications had been successful. Asked how many months into the post it was before they felt competent, one replied never; one, four months; two, three months; two, two months; and two, one month; two did not answer. Problems identified were doing non-medical tasks (eight), lack of appraisal (nine), absence of education targets (eight), no clear source of careers advice (six), and not knowing where to go for support when suffering from stress (seven).

The "lost tribe" of senior house officers has many problems, but Wessex is starting to tackle them. Local educational audit is one way to facilitate improvements in hospital training.

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1 Little P. What do Wessex general practitioners think about the structure of hospital vocational training? *BMJ* 1994;**308**: 1337-9. (21 May.)
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New post addresses deficiencies

EDITOR,—Vocational training is one success of British general practice. Paul Little rightly states that the hospital component needs reviewing as it does not reflect the views and training needs of those participating.[1] The general practice component has been criticised for not preparing practitioners for their business role. Changes in general practice emphasising the management of chronic disease, health promotion, and survival in the marketplace highlight the need for an understanding of issues concerning public health and purchasing.

The general practice regional adviser for North West Thames and the medical adviser to Kensington and Chelsea and Westminster Family Health Services Authority have developed a post at the family health services authority that aims at addressing these inadequacies. A general practitioner who has just finished his or her vocational training is attached for one year to the family health services authority and department of public health with opportunities for training in public health medicine, NHS organisation and management, and the authority's role and responsibilities, emphasising their application to general practice. Through supervision and teaching the general practitioner develops an understanding of issues including the provision of health care related to needs, preventive medicine, planning, evaluation, and the management of services and how to put these skills into practice. He or she is actively involved in the planning and provision of health care as work undertaken contributes to the development of local services. Weekly sessions are set aside for clinical work to extend training in general practice, which is arguably too short.

The health service gains through the knowledge and skills acquired being carried into general practice, enabling the provision of better care. We hope that similar posts will become commonplace and no more curious than any other on the route to a career in general practice.

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Prevention of suicide

EDITOR,—David Gunnell and Stephen Frankel's review of the literature on the prevention of suicide highlights the difficulties for psychiatric services in identifying those at greatest risk.[1] This point is further illustrated by data from a follow up study conducted in Nottingham. Consecutive first admissions to Saxondale Hospital (the Nottinghamshire County Asylum) were identified for the years 1974 and 1975. A cohort of 91 patients, comprising all those aged between 16 and 65 who were admitted from the borough of Broxtowe (total population roughly 100 000), was followed up 16 years later. Case notes of index admissions were examined to establish a diagnosis (according to the *Diagnostic and Statistical Manual of Mental Disorders*, third edition, revised[2]) and obtain other relevant clinical and demographic data. All 91 subjects were traced either up to their death or to their current general practitioner. Death certificates were obtained for all of those who had died.

The index diagnoses ranged widely, but 41 patients met the criteria for a major depressive disorder and nine met the criteria for schizophrenia. A suicidal act relating to the admission was recorded for 28, and 36 were noted to have reported suicidal ideation. Sixteen patients had died. All of these deaths had been due to natural causes: none had been due to accidents or suicide and no open verdicts had been recorded.

Such a cohort reflects the social and diagnostic mixture of many psychiatric caseloads and should represent a high risk group in both the short and the long term. Gunnell and Frankel report that in