ever, caution that doctors may be required to justify their actions when confidentiality may be breached.

IAN ASTON
Consultant in occupational medicine
Queen's Medical Centre,
Nottingham NG7 2UH

1 De Wildt G, Sweeney H. Moving away from rational medicine? *BMJ* 1996;**312**:1367. (25 May.)
2 General Medical Council. *HIV and AIDS; the ethical considerations*. London: GMC, 1995.
3 Byrne L. Insurers relax questions on HIV. *BMJ* 1994;**309**:360.

Needle exchange programmes should do more to prevent transmission of hepatitis C virus

EDITOR,—The debate on whether asymptomatic people at high risk of hepatitis C should be screened shows that, whether we agree with screening or not, until more effective treatment becomes available the most appropriate strategy is prevention.[1] The largest group of people who are at risk of hepatitis C are those who continue to inject drugs. Needle exchange programmes may have reduced the risks; however, a project in Amsterdam found no change in the seroprevalence of hepatitis C among drug users over a five year period when it introduced needle exchanges to prevent the transmission of HIV.

Hepatitis C virus can probably survive for much longer in dried blood outside the body than can hepatitis B virus or HIV. It has been identified (in the form of viral RNA, because the virus cannot be cultured) from needles and injecting paraphernalia for up to three months after use.[2] Evidence from studies of accidental needlestick injuries suggests that the amount of virus required for infection to occur is small.[3]

As the seroprevalence of hepatitis C among drug users is high, at about 80%, and the rate of chronic carriage of the virus is high[4] a user may need to use drugs only once before he or she is exposed to the virus. Many users, when using drugs for the first time, are indoctrinated by someone else. Only one episode of sharing is needed to be potentially exposed to the virus. At present, most needle exchanges provide only clean needles and syringes. Water for injection, filters, or other paraphernalia needed for clean injecting cannot be supplied.

In the light of the increasing knowledge, should we look again at what needle exchanges can provide now that hepatitis C (and perhaps infections due to as yet unknown viruses) has become such an enormous threat?

CHRIS FORD
General practitioner
97 Brondesbury Road,
London NW6 6RR

1 Seymour C, Allison M, Mills P. Screening asymptomatic people at high risk for hepatitis C. *BMJ* 1996;**312**:1347-50. (25 May.)
2 Alter MJ. Hepatitis C: a sleeping giant? *Am J Med* 1991;**91**:112-5S.
3 Mitsui T, Iwano K, Masuko K, Yamazaki C, Okamoto H, Tsuda F, *et al*. Hepatitis C virus infection in medical personnel after needlestick accident. *Hepatology* 1992;**16**:1109-14.
4 Main J. Hepatitis C: clinical aspects. *J Infect* 1995;**30**:103-6.

Testing to check success of treatment to eradicate *H pylori*

EDITOR,—Two letters[1] comment on our paper assessing the use of dyspeptic symptoms as a test for eradication of *Helicobacter pylori*[2] and cite work that is supposedly at variance with our results.[3 4] The authors fail, however, to appreciate important differences between these studies and our paper. Both of the quoted studies investigated patients with duodenal and gastric ulceration,[3 4] whereas we studied only patients with uncomplicated duodenal ulceration. Patients with haemorrhage and perforation were included in one of the studies,[4] while no data on these patients were provided in the other.[3]

The study by Reilly *et al*[3] differs from ours in several other ways, which makes direct comparison of results difficult. Firstly, the patients were assessed after a variable interval, the lower limit being 85 days. Thus sufficient time may not have elapsed for dyspeptic symptoms to resolve after successful eradication of *H pylori*. Secondly, it is not known how the recurrence of dyspeptic symptoms correlated with recrudescence or reinfection with *H pylori* as the carbon-13 labelled urea breath test was not repeated.

Although Powell *et al* reported that 12-18% of patients with peptic ulcer used ulcer healing treatment in the year after successful eradication of *H pylori*,[4] they also showed that only three (3%) patients were using such treatment for a recurrence of ulcer symptoms. Of 66 patients with peptic ulcer who were positive for *H pylori* and were followed up for 12 months,[4] two developed bleeding and two were admitted to hospital with abdominal pain. Importantly, a quarter of these patients had a history of ulcer haemorrhage and were therefore at high risk of rebleeding. We specifically excluded such patients in our study. K Bodger and R V Heatley state that excluding patients with a history of complications will not remove the possibility of patients presenting with severe symptoms or complications.[1] Even after eradication is confirmed by conventional tests, however, this possibility cannot be entirely excluded.

Most patients with uncomplicated duodenal ulcer disease in whom *H pylori* is successfully eradicated will gain a remission of their ulcer symptoms, and we maintain that there is little point in these patients undergoing testing to confirm eradication. Symptomatic patients should be allowed to use antacids or H_2 receptor antagonists as required; their wellbeing does not need to be compromised.[1] If they remain symptomatic six months after eradication treatment then their *H pylori* status can be verified with conventional tests.

P S PHULL
Senior registrar
Gastrointestinal Unit,
Aberdeen Royal Infirmary,
Aberdeen AB9 2ZB

M R JACYNA
Consultant gastroenterologist
Northwick Park and St Mark's Hospitals,
Harrow,
Middlesex HA1 3UJ

1 Testing to check success of treatment to eradicate *H pylori* [letters]. *BMJ* 1996;**312**:1361-2. (25 May.)
2 Phull PS, Halliday D, Price AB, Jacyna MR. Absence of dyspeptic symptoms as a test for Helicobacter pylori eradication. *BMJ* 1996;**312**:349-50. (10 February.)
3 Reilly TG, Ayres RCS, Poxon V, Walt RP. Helicobacter pylori eradication in a clinical setting: success rates and the effect on quality of life in peptic ulcer. *Aliment Pharmacol Ther* 1995;**9**:483-90.
4 Powell KU, Bell GD, Bolton GH, Burridge SM, Bowden AF, Rameh B, *et al*. Helicobacter pylori eradication in patients with peptic ulcer disease: clinical consequences and financial implications. *Q J Med* 1994;**87**:283-90.

General practice fundholding has improved services

EDITOR,—Sarah Stewart-Brown and colleagues should have given more thought to their description of the methodology used by the Audit Commission for its report on general practice fundholding.[1] Far from visiting "a large number of fundholding practices, family health services authorities, district health authorities, and trusts to collect qualitative data," the commission's staff visited only 56 of the 2200 practices that were fundholding practices at the time (there are now 3600), 15 family health services authorities, and 12 trusts. This very small sample is a major criticism that my association has of the report. Other survey data were collected in 1993-4 and 1994-5. In short, the report reflects the situation 18 months ago and therefore does not include the latest wave of fundholders. In the meantime, fundholding has moved on and practices have broadened the scope of purchasing and management of their patients' care.

The National Association of Fundholding Practices conducted its own survey among general practice fundholders between September and October last year. Altogether 539 responses were received (60% of the total membership). A precis of that survey has just been published.[2] It showed, among other things, that 437 respondents had developed new services, 431 consulted patients over purchasing plans, 426 had improved quality, 361 were providing more treatment than originally planned, 334 had moved a contract away from a traditional provider, 330 thought that their ability to deliver general medical services had improved, and 216 complained that changes in providers' prices were made after their budgets were set.

Our survey shows that general practice fundholding is improving the number of services and the quality of care for patients. The aims of the NHS reforms were to put patients first. Fundholding is achieving that objective. Indeed, this is acknowledged by the Audit Commission in the many positive comments that it makes in its report.

KENNETH SCOTT
President
National Association of Fundholding Practices,
11 Chandos Street,
London W1M 9DE

1 Stewart-Brown S, Gillam S, Jewell T. The problems of fundholding. *BMJ* 1996;**312**:1311-2. (25 May.)
2 National Association of Fundholding Practices. NAFP survey of fundholders. *Purchasing in practice* 1996;**8**:6-9.

Reduction in sudden infant death syndrome may be due to parents checking their babies more often

EDITOR,—Christine M H Hiley and Colin J Morley show that the continuing fall in the incidence of the sudden infant death syndrome in Cambridge in 1993 was strongly associated with the increased proportion of babies who slept in the supine position.[1] In the same issue A S Douglas and colleagues speculate about why prone sleeping is a risk factor for the syndrome, linking it with less exposure of the eyes to light and interference with the maturation of mechanisms of the photoneuroendocrine system.[2] Is there a simpler explanation for the protection associated with supine sleeping?

Two years ago, one of us (DPD) suggested that publicity to place babies to sleep on their backs could be having another effect on parental behaviour—that babies were being checked more often and left alone much less than previously.[3] Perhaps these practices would enable signs of illness to be detected earlier and provide a richer sensory environment to help the baby through any difficult transition in the control of breathing.[4] The benefit of these practices, it was suggested, could even be a proxy for back or side sleeping.[3] (In many populations in which the syndrome is uncommon not only are babies laid on their backs but they are also looked after in rich sensory environments.) Hiley and Morley found that in 1993 a greater proportion of babies slept in their parents' bedroom at later ages and slept in the parental bed, which suggests that mothers could have been observing their babies more closely. A study of awareness of the "reduce the risk" campaign in a socially deprived area in south Wales in 1994 showed that a third of 250 mothers with children born before the introduction of the campaign said that they checked their babies more often than they had done previously.[5]

For babies to endure increasingly long periods of solitude after birth is biologically unreasonable. In 1991 in Cardiff we included another factor to lower the risk of the syndrome: we encouraged mothers to have their babies in their room at night for the first six to nine months and to keep the cot in which the babies slept by day close by. To focus only on posture, heating, and smoking and not to consider where a baby sleeps could detract from other factors in the care giving environment that might be protective. Any intervention programme aiming to reduce the incidence of the sudden infant death syndrome must also consider the broad range of care practices that could reduce the risk.

D P DAVIES
Professor

Department of Child Health,
University of Wales College of Medicine,
Cardiff CF4 4XN

B M ANSARI
Professor
I E L EVANS
Registrar

Department of Child Health,
East Glamorgan Hospital,
Church Village,
Pontypridd CF38 1AB

1 Hiley CMH, Morley CJ. Risk factors for sudden infant death syndrome: further changes in 1992-3. *BMJ* 1996;**312**:1397-8. (1 June.)
2 Douglas AS, Aslan TM, Helms PJ. Seasonality and the sudden infant death syndrome during 1987-9 and 1992-3 in Australia and Britain. *BMJ* 1996;**312**:1381-4. (1 June.)
3 Davies DP. Ethnicity and SIDS: what have we learnt? *Early Hum Dev* 1994;**38**:215-20.
4 McKenna JJ. Evolution and sudden infant death syndrome (SIDS). Part II. Why human infants? *Human Nature* 1990;**1**:179-206.
5 Evans IE, Ansari BM, Davies DP. Awareness of risk-reducing measures relating to sudden infant death syndrome in Rhondda and Taff Ely. *Proceedings of the annual British Paediatric Association meeting 1995*. London: BPA, 1995.

Information about initiatives that use new technology to inform patients should be shared

EDITOR,—Chris Lock's review on the role of information technology in health care focuses on hospital information support systems and highlights the need for evidence in determining the value of information technology applications in health care.[1] The many potentially useful, though small scale, systems that are being designed for use directly by patients are often overlooked.

At a time when the public is demanding more information on health care[2] these interactive educational packages are increasingly being developed in hospitals and academia. Healthpoint is a public access system produced by Glasgow University, which provides patients with information related to health that is accessed with a touch screen.[3] PharmAssist, a system being developed at Lewisham Hospital NHS Trust, informs patients about how to take their medicines.[4] HealthWise has produced a series of computer games, which educate children on the dangers of alcohol, smoking, and drug misuse.

In his editorial linked with Lock's review Liam J Donaldson notes the difficulty in evaluating computer applications owing to their increasing diversity and the lack of formal evaluation criteria.[5] Despite these difficulties, evaluations that include assessments of content and acceptability to patients are feasible.

The King's Fund has set up an initiative, "promoting patient choice," which supports the development and evaluation of information packages to help patients choose between different treatment options. American interactive videos known as shared decision making programs that cover topics such as benign prostatic hyperplasia, hormone replacement therapy, and breast cancer are being evaluated in both primary and secondary care in Britain. The acceptability of a video on treatment for menorrhagia and the accompanying booklet (based on the systematic review conducted for an *Effective Health Care* bulletin) will soon be evaluated in a randomised controlled trial of 600 patients. Six other sites are developing and evaluating a variety of media, from audiocassettes to CD-ROMs, on topics such as control of postoperative pain and colorectal cancer. The King's Fund is also undertaking a review of the various roles that new electronic media can have in providing information about health and illness to patients and the general public.

The locally devolved nature of the NHS has led to a lack of sharing about such initiatives. We are trying to collate information about initiatives that use current and new media technologies to enable patients to become informed participants in decisions about their care and would be interested to hear about similar projects.

MARK DUMAN
Project officer, "promoting patient choice"
SIMON WALLACE
Senior registrar in public health medicine

King's Fund Development Centre,
London W1M 0AN

1 Lock C. What value do computers provide to NHS hospitals? *BMJ* 1996;**312**:1407-10. (1 June.)
2 Consumers' Association. The NHS: what's the verdict? *Which? Way to Health* 1995 Jun:80-3.
3 Jones RB, Navin LM, Murray, KJ. Use of a community-based touch-screen public-access health information system. *Health Bull* 1993;**51**:34-42.
4 Duman MB. New multimedia patient counselling system. *Br J Healthcare Computing and Information Management* 1995;**12(8)**:30-2.
5 Donaldson LJ. From black bag to black box: will computers improve the NHS? *BMJ* 1996;**312**:1371-2. (1 June.)

Mortality in second generation Irish people living in England and Wales

Possibility of excess smoking should be investigated

EDITOR,—S Harding and R Balarajan's paper and John Haskey's accompanying editorial highlight the important issue of excess mortality among second generation Irish people living in England and Wales.[1 2] Somewhat surprisingly, both articles devote little discussion to the source of the main causes of the excess deaths, which are lung cancer, all cancers, and respiratory disease. None of the figures for the remaining categories of cause specific mortality are significantly different from the national averages for England and Wales. Surely excess smoking among people of Irish origin, and not ethnicity, is a prime candidate as a cause of the excess deaths. Are these data not available in the 1% longitudinal sample from the Office for National Statistics?

J K CRUICKSHANK
Senior lecturer in clinical epidemiology

Clinical Epidemiology Unit,
University of Manchester Medical School,
Manchester M13 9PT

1 Harding S, Balarajan R. Patterns of mortality in second generation Irish living in England and Wales: longitudinal study. *BMJ* 1996;**312**:1389-92. (1 June.)
2 Haskey J. Mortality among second generation Irish in England and Wales. *BMJ* 1996;**312**:1373-4. (1 June.)

Effects of social deprivation in whole population should be addressed

EDITOR,—S Harding and R Balarajan's paper on mortality in second generation Irish people living in England and Wales concludes that special consideration should be given to the health needs of this population group.[1] We wish to challenge some of the statements made, because the data presented do not support the text.

The authors state that there is "a pattern of higher mortality from most major causes," presumably because of the values of the point estimates of the standardised mortality ratios. The confidence intervals for these ratios, however, cross from below to above 100 for most of the diseases shown, so that the true ratio could lie anywhere between these values and even indicate a decreased mortality. Though the crude standardised mortality ratios for men and women for all causes of death seem to indicate a higher mortality, the difference between the second generation Irish women and all women disappears after adjustment for social class.

The authors do not mention genetics. If, however, the genetics connected with Irishness were a cause of increased mortality then it could be suggested that those people with two Irish parents would be more at risk than those with one (a dose-response relation). In fact, there was no significant difference between these two groups.

Problems with the health of second generation Irish people are not comparable with those of population groups for whom language and culture may cause difficulties with access to health care or advice. We believe that it would be wrong to direct excessive time and effort specifically to this group but that concerted efforts should be made to address the health issues connected with social deprivation in the whole population.

H M P FIELDER
Senior registrar in public health medicine
J G AVERY
Consultant in public health medicine
D WRIGHT
Deputy director of public health

Iechyd Morgannwg Health,
Swansea SA1 1LT

1 Harding S, Balarajan R. Patterns of mortality in second generation Irish living in England and Wales: longitudinal study. *BMJ* 1996;**312**:1389-92. (1 June.)

Authors' reply

EDITOR,—J K Cruikshank raises the important issue of the likely contribution of smoking to the increased mortality from all cancers, and especially lung cancer. Mortality from respiratory disease was also raised in both men (non-significantly) and women. Unfortunately, we do not have data on smoking in the Office for National Statistics' longitudinal study.

We believe that, though testing for significance is central to the analysis, the observation of patterns that are consistent across sex, age, and time is equally important in epidemiological studies. Small numbers are often a major problem, even in studies such as the Office for National Statistics' longitudinal study, which has around 650 000 members in the cohort. With the period of follow up extended from 1971-89 to 1971-92, we are able to test the statement of H M P Fielder and colleagues that "the difference between the second generation Irish women and all women disappears after adjustment for social class." Table 1 shows that the increased mortality among women is significant at the 5% level after adjustment for social class.

We were careful not to speculate on the genetic component of "Irishness." This is because we believe that a gradient in mortality across having