approach. Case finding, notification of cases, enhanced surveillance, and modification of the environment in which the disease exists are strategies that can usefully be applied to bullying. Doctors are perhaps better placed than parents to push this approach.

We need also to recruit the vast majority of children who are neither bullies nor victims. In my survey of a secondary school in Nottingham the response of three quarters of children to the bullying of another child was that of a bystander who does not want to get involved; a fifth said they could be persuaded to join in (unpublished data). Whitney and Smith found that most children did nothing to help victims either because they did not know how to help or because they thought it was not their business.² Perhaps this statistic would make a good indicator of the success of an antibullying programme. Children should be taught not only not to bully others but also not to tolerate bullving of others.

Health care staff working with children in the primary care setting have a vested interest in working in concert with school authorities towards this ideal: they will have less morbidity related to bullying to deal with. One approach would be to regard the detection of a case of bullying as an indication of serious problems in the interrelationships of children in the school. As in established child protection procedures, a case conference should be called of all professionals concerned and a strategy agreed for the prevention of future cases.

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- 1 Dawkins J. Bullying in schools: doctors' responsibilities. BM7 1995;310:274-5. (4 February.)
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Accident and emergency departments need management guidelines

EDITOR,-Judith Dawkins emphasises the importance of doctors' recognition of bullying.1 Accident and emergency departments may be one point of contact between health care services and child victims of bullying. We reviewed the case notes of 305 children presenting to an urban accident and emergency department in the west of Scotland because of incidents at school over 56 weeks in 1993 and 1994. Twenty of the children had attended because of injuries deliberately inflicted by others.

Twelve of the children were boys and eight girls; the group was equally divided between primary and secondary schools. The child had been tripped or pushed in 10 cases, punched or kicked in three, and intentionally struck on the head or face by a brick or stone in three. One child attended after taking a drug overdose after an assault at school. Two further episodes resulted in serious injuries, with one child sustaining a facial fracture after being struck by a baseball bat and another receiving multiple injuries after falling 15 m while trying to escape from pursuers. In total, the children sustained six fractures, required 23 inpatient days of treatment, and received two general anaesthetics during their treatment. The group made 18 attendances at the fracture clinic.

These cases were identified during work designed to find the health care needs associated with accidents at school. The project did not attempt to collect information specifically on bullying, and the figures are therefore likely to be underestimates of the true number of children presenting to accident and emergency departments as a result of bullying at school. The review of the

case notes showed that casualty officers recorded the mechanism of injury more often than they noted the cause of the incident.

We suggest that accident and emergency departments are an important point of contact with children who are victims of bullying. Training for staff should include information on recognising bullying and advice on what steps to take when it is identified. Assessment of children with injuries related to school should include direct questioning about the cause as well as the mechanism of injury. Closer liaison among education departments, hospitals, parents, and police when appropriate may offer great benefits to child victims of bullying.

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Assessing the consequences of changing childbirth

General practitioners collect valuable data

EDITOR-James Owen Drife's editorial on assessing the consequences of changing childbirth contains several valid points.1 The historical basis of the collection of data by hospital units may well have resulted in high quality clinical audit. Regrettably, such data collection has invariably missed a major source of clinical data-namely, the data recorded by the general practitioner throughout the woman's antenatal and postnatal care. General practitioners have rarely been encouraged to share such data with other carers in the NHS. Maternity care is but one example of this. Diabetes, asthma, and rheumatoid arthritis are three major diseases in which most care is given in the primary care sector and yet decisions and national comparative analyses are based mainly on hospital records.

Changing Childbirth has highlighted the role of the primary care team in providing continuity of care.2 It also recommends that mechanisms should be developed to ensure that data are made available for national analysis. Now, with the development of the Read code as a national standard for recording and sharing data within the NHS and the development of electronic links between practitioners and the family health services authorities and health boards, true national statistics should be possible. A further step, however, is required. General practitioners must be encouraged to understand the implications of recording data. All too often inadequate or inappropriate Read codes are used for morbidity data, with the result that data analysis becomes too generalised for appropriate conclusions to be reached.

The important issues raised in Drife's editorial should encourage family health services authorities or health boards to implement standards for the recording of morbidity in primary care. These organisations should also develop appropriate training in data analysis for primary care teams so that they can experience the benefits of the mass of data at their fingertips.

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- 1 Drife IO. Assessing the consequences of changing childbirth. BMJ 1995;310:144. (21 January.)
- 2 Department of Health. Changing childbirth. London: HMSO, 1993

Time is ripe for a "pregnancy based system" of data collection

EDITOR,-James Owen Drife echoes the widespread anxiety regarding the inadequacy of present maternity data and emphasises the importance of satisfactory information for assessment of the consequences of changing practices of pregnancy care in Britain.1 His proposal for an improvement in the collection of data is feasible, and the necessary building blocks for achieving this are already being put in place through the initiatives of the Information Management Group of the NHS Executive

The NHS Executive launched the NHS information management and technology strategy in December 1992. One of the principal initiatives of the strategy is "a common [information management and technology] infrastructure for secure sharing of information."² Included in this initiative are the replacement of the NHS number, the development of NHS administrative registers, NHS-wide networking,' a thesaurus of clinical terms, technical standards, and ensuring confidentiality and security. These projects are well under way, and some are nearing completion. An NHS number with a new format will be introduced this year to replace the diverse formats (more than 20) that exist now. NHS-wide networking will allow family health services authorities, regional health authorities, district health authorities, general practitioners, community carers, hospitals, and others to communicate with each other and share information subject to security and confidentiality safeguards. The aim of the "terms project" is to produce Read terms version 3, which will be a national thesaurus of agreed clinical terms. The medical component of the thesaurus has already been launched after the participation of over 1000 clinicians from 43 medical specialty groups. The full version 3, with contributions from professions allied to medicine (chiropody and podiatry, dietetics, occupational therapy, physiotherapy, and speech and language therapy) and the nursing professions (health visitors, midwives, and nurses), is scheduled to be ready by July.

Hence the infrastructure needed for the adequate collection of nationwide maternity data will soon be in place. The time is now ripe for the development of a standard "pregnancy based system,"1 which will enable records not only of antenatal and intranatal care but also of postnatal care to be kept. The system will need the endorsement of all professional bodies involved with the care of pregnant women before its implementation can be planned.

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- Information Management Group. IM&T strategy overview. Leeds: Management Executive, 1992.

Smart cards are expensive and easily damaged

EDITOR,-James Owen Drife suggests that the pregnancy health record "Combined with a 'smart card'...could provide good pregnancy based data." Those who have suffered in the struggle to domesticate the awesome power of the computer chip eventually learn, too often the hard way, three important things. (1) Always keep the master version in the safest place and ensure that it is frequently and regularly backed up. (2) Too often

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the expensive hardware of last year is this year's dusty junk. (3) Above all, beware of creating more than one master copy of the latest version. If the text you have spent all day revising does not include vesterday's hard worked changes but is based instead on an earlier, unrevised version, hours of human effort will be necessary to merge the two sets of modifications into a single useful master copy.

In maternity care two further fundamental warnings apply: beware lest technology is introduced for its own sake, not because it truly improves patients' care; and choice and consumer power come from openness, not from black stripes and inaccessible microchips.

All these principles seem to have been forgotten in moves towards using smart cards as an advance in the provision of maternity care. Such cards are unreadable without expensive technology, too vulnerable to damage or destruction to be used as the master copy, and cannot be used as the master copy because they are not immediately accessible for updating. The use of one of several different types of smart or optical card will too easily lead to a further waste of scanty health resources; other industries should be taking the risks entailed in the standardisation of smart card technology. The electronic master copy of the antenatal record ought to be in the primary health centre, frequently backed up, and regularly updated by modem from a variety of other sources and possibly eventually (with potential problems borne in mind) from hand held, mobile devices for collecting data.

Possibly the only reasonable use of a smart card might be as a personally held identification key. If it was available in a clinic such a card would automatically minimise the risk of one mother's data being erroneously entered into another mother's electronic record.

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Management of the irritable bowel syndrome

Early reassurance is important part of treatment

EDITOR,-Recent articles have discussed the management of the irritable bowel from several points of view. R C Spiller argues for a predominantly medical approach to treatment once the hurdles of reassurance and dietary advice have been negotiated,1 while Francis Creed emphasises the importance of psychological treatments for selected groups of patients.1 Michael J G Farthing explores the relations between the bowel, body, and brain and provides further advice about the importance of making an early, positive diagnosis and of avoiding overinvestigation.²

Perhaps the most important moment for a patient with the irritable bowel syndrome is the moment when he or she decides to make the first contact with general practice. We know from community based studies that the prevalence of the syndrome in the general population is roughly 20% but that only between a quarter and a third of patients consult general practitioners.3 Work in North America and Britain has shown that the severity and frequency of symptoms alone poorly predict the likelihood of consultation and that concerns that the symptoms represent a serious disease and specific worries about cancer explain much of the difference between those who do and do not consult.4 Patients who consult are more likely to have abnormal levels of anxiety and clinical depression than people with the syndrome

in the community, in whom affective disorders are much less commonly seen.

This means that we have to provide reassurance. Reassurance requires a direct confrontation of patients' anxieties about cancer and serious disease and an exploration of these beliefs if they are not immediately apparent. Unless this happens early in the course of the medicalisation of the syndrome, further attempts at reassurance, accompanied by repeated negative results of investigations, will probably serve simply to increase anxiety and apprehension about the symptoms and their underlying cause.

The corollary is that initial treatment needs to embrace physical and psychological approaches, and a cognitive approach to symptoms is probably more likely to be successful than a search for "treatable" affective disorders. Gomborone et al recently documented the negative cognition of patients with the irritable bowel syndrome,5 and a randomised controlled trial of an early cognitive therapeutic intervention in the syndrome, starting as soon as possible after the first contact with general practice, seems worth while.

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- 1 Spiller RC, Creed F. Irritable bowel or irritable mind? BMJ 1994;309:1646-8. (17 December.) 2 Farthing MJG. Irritable bowel, irritable body, or irritable brain?
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Food intolerance may play a part

EDITOR,-In his review on the irritable bowel syndrome Michael J G Farthing ignores the evidence that symptoms can, in many cases, be reliably attributed to food intolerance.1 As early as 1771 the King's physician, Sir George Baker, presented to the Royal College of Physicians a patient whose abdominal symptoms improved with a diet of "sea biscuits and salt meat."² During the first half of the 20th century several reports of patients with abdominal pain that responded to dietary modification were published from the United States.3 Studies have shown that as many as 70% of patients with abdominal pain and diarrhoea may be successfully managed by diet³⁴; double blind challenges have provided objective evidence of food intolerance. As follow up of patients shows that most of them remain well on diet for long periods the value of successfully identifying food intolerance should not be dismissed. In addition, use of antibiotics (with consequent changes in the gut flora) may be an important factor in the development of the syndrome.5

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- 1 Farthing MJG. Irritable bowel, irritable body, or irritable brain? BMJ 1995;310:171-5. (21 January.)
 Drummond JC, Wilbraham A. The Englishman's food. London:
- Jonathan Cope, 1959:254.
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EDITOR,-The role of food intolerance in the production of symptoms in patients with the irritable bowel syndrome is interesting but controversial. We should not forget that both the syndrome and perceived food intolerance are common in the community, occurring in roughly a fifth of the population.1 It would therefore be expected that the two conditions would quite frequently coincide in the same person without this necessarily implying causality. Actual food intolerance, determined by double blind, placebo controlled food challenge, is reported to occur in 1-2% of the population. In a large, careful study Nanda et al found that 48% of 200 patients with the irritable bowel syndrome responded to an exclusion diet, most of whom continued with the diet because of prolonged benefits.² More than half of the initial study group, however, did not benefit in any way. In addition, there was no correlation between the response to the exclusion diet and any particular symptom complex.

Introducing a formal exclusion diet is a substantial undertaking and can considerably disrupt normal life. Some patients with the irritable bowel syndrome are, however, keen to pursue this approach, and those who respond may find dietary restriction less of a burden than their abdominal symptoms. I certainly encourage patients to explore dietary triggers and stated this clearly in my article. I generally guide patients on the groups of foods that are most likely to be associated with abdominal symptoms, such as dairy products and grains.² I am less enthusiastic about formal exclusion diets because I see a large number of patients who have tried this approach and in whom it has failed and because I have found that treating patients with dietary exclusion is less successful than some of the other approaches outlined in the article.

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1 Young E, Stoneham MD, Petruckevitch, Barton J, Rona R. A population study of food intolerance. *Lancet* 1994;343:1127-9.

2 Nanda R, James R, Smith H, Dudley CRK, Jewell DP. Food intolerance and the irritable bowel syndrome. Gut 1989;30: 1099-104.

Proposed new deprivation index

Has major flaws in its derivation and validation

EDITOR,-David C E F Lloyd and colleagues propose a new deprivation index for use in general practice, which is based on the proportion of patients exempted from prescription charges because they have a low income. It is therefore a proxy for the proportion of the practice population living in poverty. The authors believe that it has advantages over the indices with which they compare it (Jarman, Townsend, and Carstairs)namely, that it is practice based and can be frequently updated. They correlate it with the established deprivation indices, producing impressive results at health authority level but unfortunately presenting no results at the general practice level, where it is intended to be used.

There are major flaws in the derivation and validation of this index, which will adversely affect its utility as a measure of deprivation for practice populations. As the authors acknowledge, the low income category of exemption from prescription charges overlaps with other categories. For example, people on low incomes with diabetes may prefer to claim exemption on the basis of illness rather than poverty. The proposed index would thus register variation in local attitudes to poverty, with people being more likely to choose the disease option in areas where poverty is most stigmatised. Prescribing analysis and cost (PACT) data depend on the provision and quality of services, which further confound the index.