staff, whether civilians or military, should always know what they are likely to encounter when they enter a war zone or its equivalent, and should train accordingly. Secondly, they should plead for as many elements of the infrastructure as possible to be in place. Conditions may not allow the provision of this infrastructure, but when it is present it helps in the management of patients and allays the fear and despair of medical staff deployed to primitive locations.

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New diagnostic test for vaginal infection

EDITOR,—The rapid visual test for bacterial vaginosis developed by Thomas C O'Dowd and Nick Bourne is based on diamine oxidases and is targeted to react with diamines, cadaverine, and putrescine, which are responsible for the fishy odour associated with bacterial vaginosis.[1] The authors succinctly outline the steps entailed in obtaining an international patent for the test, though they have deferred publication of the relevant scientific attributes of the test. They have probably obtained extensive data on the relative utility of the test, using bacterial culture of pathogens responsible for bacterial vaginosis as the gold standard to establish a definite diagnosis in a woman. Presumably, too, they have determined the sensitivity, specificity, and positive and negative predictive values of the test and have extensively, though confidentially, subjected the test to extended peer review in the scientific community. General practitioners and office based specialists would need the above details before trusting in the utility of the test.

The test's stability at high ambient temperatures must be shown. In addition it would be desirable to investigate the test's utility in areas where ambient temperatures are below 10°C and facilities for maintaining temperatures around 20°C are not likely to be available.[2] If extensive clinical trials have not been done in different countries the authors may have been premature in obtaining a prompt patent: a patent does not ensure infallible performance in the field, where meritorious vaccines and prophylactic substances have performed poorly.

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Children's consent to treatment

EDITOR,—We wish to respond to the strong position taken by J P H Shield and J D Baum with respect to children's informed consent to treatment.[1] A doctor's responsibility to his or her patient is to diagnose and treat the patient skilfully and to disclose adequate information to enable the patient to become informed about any contemplated procedure. Only then is the patient capable of giving informed consent.[2]

Shield and Baum in effect propose obtaining a "combined consent," from the paediatric patient as well as the parents. Although we agree that any procedure or surgery should be discussed with a paediatric patient in terms that he or she can understand, a legal requirement to do so would not only trivialise the process of obtaining informed consent but also add a cumbersome legal manoeuvre in most cases. We agree with Gellis that "We have trouble enough as it is dealing with parents who refuse to give informed consent and that the requirement suggested by Shield and Baum "would simply [entangle doctors] in additional legal requirements."[3]

Belli and Carlova have reported that hospital consent forms are poorly understood by adult patients. One study showed that 61% of consent forms require a college level education for full comprehension of their contents. Unfortunately, however, only 31% of the population of the United States has any college education.[4]

The current law in most states of the United States has established a "bright line" for informed consent relating to paediatric patients. Parents of the patient provide their consent to the procedure being contemplated. It is relatively rare for the law to give us such clear guidance on such an important issue. Why tamper with it? We believe that eliciting written informed consent from paediatric patients is both inappropriate and impractical.

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Case management after severe head injury

EDITOR,—We accept what seems to be the principal message of R J Greenwood and colleagues' study of the effects of case management after severe head injury—that is, that case management is not a substitute for improvement in rehabilitation services.[1] While recognising the need for evaluation of services, however, we believe that case management should not be disregarded as a potentially important element in a well integrated service. Our concept of case management differs from the model evaluated by Greenwood and colleagues.

The fact that the case managers in the study increased the number of contacts with the less commonly used rehabilitation services such as social work, psychology, and speech therapy is to be applauded. This, however, is only the first step in a successful rehabilitation and reintegration programme. The failure of the case managers to increase the time spent in therapy and to influence outcomes might have been due to many factors that we are not told about in the paper. For instance, the lack of an effective, cohesive, and coordinated programme of rehabilitation may have had a role. We do not know whether the different therapists communicated adequately or effectively with each other or whether anyone made sure that the overall programmes were optimal for the patients and relatives. We do not know, for example, whether similar cognitive tests were needlessly and inappropriately repeated by a series of different professionals; whether programmes were planned and goals set together with the patients and relatives; and whether these programmes and goals were reviewed systematically. Indeed, our experience in Derby suggests that case managers work best in this role of goal setter, and measures such as "contacts with therapists" are highly suspect as sensitive indicators of good outcome. It has been more useful to look at the "appropriate" use of rehabilitation services; in some cases less rather than greater use may be appropriate.

We believe that case management will have only the limited success shown in this study unless the case manager not only is supported by an adequate and coherent rehabilitation team but, most importantly, is part of that team. The case manager should play an active part in coordinating individual patient's programmes by negotiation with the patient, relatives, and the therapists involved so that, throughout, any therapeutic input may be timely and relevant to short and long term goals that have been identified.

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Clinical scores in the differential diagnosis of acute stroke

EDITOR,—Routine computed tomography for all patients with stroke is not available to some doctors, and this poses management problems. The Guy's Hospital score and the Siriraj score are the "poor man's computed tomography" in terms of reliability, but Maria Grazia Celani and colleagues suggest that they may be used as a temporary guide to management pending computed tomography,[1] and Poungvarin *et al* suggested that they could be used as a means of targeting computed tomography at cases in which uncertainty exists.[2] If computed tomography is not available at all (for whatever reason), or if the 10-14 days after stroke during which computed tomography can reliably differentiate infarction from haemorrhage has passed, the Guy's Hospital and Siriraj scores may still have a useful function.

If one considers, for example, the age group 75-84 (the decade in which stroke is most common) and allows for the difference in 30 day mortality between haemorrhage and infarction,[3] roughly 8% of the patients surviving to 30 days would be expected to have had a cerebral haemorrhage. Aspirin after ischaemic stroke can be expected to prevent 40 vascular events per 1000 patients treated for three years.[4] If all patients surviving to 30 days are given aspirin and it is assumed that giving aspirin to patients with haemorrhagic stroke will cause rebleeding in all cases within three years, then 80 cerebral haemorrhages will be induced per 1000 patients treated for three years. If the chance that the original stroke was haemorrhagic was 50% according to one of the scoring systems then a break even point exists. This corresponds to a Guy's score of 14 or a Siriraj score of approximately 0·5.

Our suggestion is therefore that patients surviving to 30 days who score below these values could be given aspirin while those scoring above

these values would not be. On the basis of validation work done in Britain on the Guy's score[5] this would deprive about 5% of patients with infarcts of aspirin treatment, resulting in an increase of only about two preventable events per 1000 patients per three years. Delaying aspirin treatment for 30 days may also "result in an increase in some preventable events, but it is difficult to calculate how many and the number is probably not great. Until the results for the international stroke trial are available it is probably best to delay aspirin for 14 days anyway. The assumption that aspirin will cause rebleeding in all cases of haemorrhagic stroke is almost certainly pessimistic but is based on the axiom "first of all do no harm."

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Adverse reactions to measles immunisation

EDITOR,—Richard Aickin and colleagues state that hypersensitivity reactions to measles vaccine in children with allergy to egg protein are mild and not related to the severity of the clinical reaction to egg.[1] Our data are not consistent with this.

We evaluated immediate adverse reactions after measles vaccination during a campaign against measles in the area of Parma, Italy, between November 1990 and June 1992. Children were immunised with a vaccine grown in human fibroblast culture (Moraten, Berna), which is recommended for children with allergy to eggs. After being immunised the children were observed for at least 30 minutes at the vaccine clinic. The doctors referred children with possible hypersensitivity reactions to the vaccine to the department of paediatrics.

Measles vaccine was given to 3300 children aged 13 months to 10 years. Three children were admitted to the department of paediatrics because of severe reactions a few minutes after administration of the vaccine (table). They were treated with subcutaneous adrenaline, intravenous hydrocortisone, nebulised salbutamol, and intramuscular promethazine. The symptoms resolved completely. All three children had a history of atopy (table). Results of skin prick tests and levels of specific IgE antibodies to the allergens listed in the table were positive. Food allergy was ascertained by controlled challenges.

Our data emphasise the potential of measles vaccine to cause appreciable adverse reactions in children with a history of severe multiple allergies, including allergy to egg. Differences between our population and that studied by Aickin and colleagues may explain the differences between our findings. As the measles vaccine in our study was not grown in chick embryo fibroblast culture, reactions may have been due to cross reactivity between constituents of the vaccine and either egg or cows' milk proteins.[2,3] We agree that "measles immunisation should be performed in a setting where any adverse reactions can be dealt with appropriately." Our results suggest, however, that this practice should be restricted in children with severe food allergy.

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Reactions to measles vaccine and history of atopy in three children

Case No	Sex	Age at immunisation (years)	Reaction after immunisation	History of atopy: Allergens	History of atopy: Clinical reactions
1	M	4	Urticaria, angio-oedema, diffuse rash, wheezing, hypotonia	Egg	Vomiting, dyspnoea, cough, generalised urticaria
				Cows' milk, potato, wheat	Atopic eczema
				Trout	Generalised urticaria, atopic eczema
2	F	8	Pallor, vomiting, cough, wheezing, urticaria, angio-oedema	Egg	Vomiting, atopic eczema, swelling of mouth, generalised urticaria
				Cows' milk	Vomiting, rhinitis, wheezing, atopic eczema, angio-oedema, Swelling of mouth
				Mites, grasses	Rhinitis, asthma
3	M	4	Drooling, urticaria, dyspnoea, vomiting, abdominal pain, hypotension, hypotonia, pallor, sweating	Egg	Never previously ingested
				Cows' milk	Abdominal pain, pruritus, generalised urticaria, dyspnoea, atopic eczema
				Grasses	Asthma, rhinitis

Measles and rubella immunisation campaign

EDITOR,—In a letter to district general managers and district directors of public health the Department of Health has announced a measles and rubella immunisation campaign starting on 1 November.[1] It is aimed at all children aged 5 to 16 on the supposition that this will prevent an epidemic of measles next year. The evidence for this campaign has not been published. The campaign is unprecedented in terms of the number of immunisations required in the time allotted and in that family doctors have been excluded from the work unless given a contract from within their own health district; the department now says, however, that family doctors may be used for tracking down missed children (personal communication).

The campaign will produce considerable strains on purchasers, financially, and on providers, who are already fully committed. In a letter to consultants in communicable disease control the Department of Health suggests that the BCG campaign scheduled for the autumn could be postponed[2]—this at a time when tuberculosis is increasing considerably in many parts of Britain.

Would not the hypothetical epidemic be curtailed if the campaign had been arranged over a full academic year and had involved both community health services and family doctors, thus spreading the load to much more manageable proportions?

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Cardioprotective effect of hormone replacement therapy

Is not due to a selection bias

EDITOR,—Ward F M Posthuma and colleagues have shown that many of the studies that report reductions in the risk of coronary disease among postmenopausal women using hormones also show decreases in cancer.[1] They claim that this implausible result shows a selection bias toward healthier women for hormone treatment and that the benefits in terms of heart disease must be considered to be suspect. In the exchange of correspondence they do not address the substantive arguments raised by Stevenson and Baum but instead accuse them of showing "ignorance of common medical reasoning."[2,3] Posthuma and colleagues, however, seem themselves to have ignored some common medical reasoning.

In their paper they talk about "total cancer within each study," but in many instances the studies were reporting the mortality from cancer rather than the incidence of cancer. This is an important distinction because, typically, patients who die of cancer have had the disease diagnosed previously. It is well known that many physicians refrain from giving hormones to postmenopausal women who have already been diagnosed as having cancer. Hence studies of mortality from cancer will naturally tend to show a spurious protective association of postmenopausal hormones unless women with cancer at the baseline have been excluded. This spurious association has nothing to do with the selection of women according to their risk of coronary disease.

A direct and more relevant approach would have been to assess the distribution of risk factors for coronary heart disease among users and non-users of oestrogen. Most studies that have made this comparison have indeed found that users tend to have a more favourable profile of risk factors. Because this is primarily a sociological rather than a biological association, however, the differences in the profiles of risk factors will vary widely according to the population studied. In particular, one would expect that in general population surveys the differences in the profiles of risk factors