no details of the training that their staff receives.

The number of medicolegal cases of misdiagnosis of chest pain continues to be alarmingly high, so much so that the Medical Protection Society has highlighted it in its latest training video. The rather complacent attitude of the authors of this article could worsen rather than improve the situation.

S C JORDAN

Department of Cardiology,
Bristol Royal Infirmary,
Bristol BS2 8HW

1 Tachakra SS, Pausey S, Beckett M, Potts D, Idowu A. Outcome of patients with chest pain discharged from an accident and emergency department. *BMJ* 1991;**302**:504-5. (2 March.)

AUTHORS' REPLY,—The purpose of our study was to determine whether or not the junior doctors working in an accident and emergency department could, with adequate training, safely determine which patients are likely to have had a myocardial infarction and require admission and which do not. It is by no means uncommon for walking patients with apparently trivial chest pains to have been found to have suffered a recent myocardial infarct, and conversely some patients arriving by ambulance are found to have trivial conditions. In our study 33 of 122 (27%) walking patients were admitted and 47 of 133 (35%) who arrived by ambulance were discharged.

In response to Dr Jordan's second point, we should have made it clear that if a patient did not respond to three letters the general practitioner was contacted.

Some patients who were discharged may have had small infarcts and subsequently settled without further symptoms. These patients could be detected only by a study that included serial electrocardiography and measurement of cardiac enzymes in patients discharged with a diagnosis of non-cardiac pain; this was beyond the scope of our study. Such a project, though interesting, would be difficult to perform.

We agree that every casualty officer must be aware that it is possible to have a normal electrocardiogram in a patient suffering a myocardial infarct. In most cases, however, the tracing will show some abnormality and in cases of doubt, a second electrocardiogram after one hour is often very helpful. We believe that it is a wise precaution to obtain an electrocardiogram in all patients over 50 years presenting with chest pain as a routine. Patients may trivialise their symptoms and try to persuade the doctor that the pain is due to a muscular injury or other minor conditions. An electrocardiogram, even if not clearly diagnostic, is a useful reminder to the busy casualty officer to consider cardiac disease.

We agree with Dr Jordan on the overriding importance of training and supervision of casualty officers. We believe that compulsory attendance at a formal weekend induction course is beneficial. Such a course for newly appointed casualty officers has been run at Central Middlesex Hospital since 1984, and we have been fortunate in being able to attract high quality speakers from a large area. This introduction needs to be reinforced by continuous tuition in the department by motivated middle and senior grade staff.

S S TACHAKRA M BECKETT
S PAWSEY D POTTS
A IDOWU

Accident and Emergency Department,
Central Middlesex Hospital,
London NW10 7NS

Community pharmacist

SIR,—The Royal Pharmaceutical Society of Great Britain is pleased that Professor Michael D Rawlins generally supports the development of the role of the community pharmacist, particularly in the provision of more advice on health care and of diagnostic services to a specified standard in the community pharmacy setting.[1] Professor Rawlins can be assured that the society has already taken action to ensure that the education and training of pharmacists meet the requirements for these developing roles.

Therapeutics was added to the pharmacy degree course some years ago, and response to symptoms now forms an integral part of core tuition in every course. The structured preregistration experience programme is being revised to make it competency based. Social and behavioural sciences will feature prominently in both the degree and the programme, but the essential basis of pharmaceutical science in the undergraduate course will be maintained, as it must be if pharmacists are to continue to be expert in the ways in which the formulation of medicinal products affects treatment. In recent years there has also been a substantial increase in funding from the Department of Health for continuing education for pharmacists working in the NHS, and the council of the society is tackling the thorny question of the assessment of competence in practice.

Training courses for support staff on medicines counters have been developed in recent years. Well trained assistants recognise when the pharmacists needs to be personally involved, and the pharmacist in turn recognises when reference to a medical practitioner is essential.

The full potential of community pharmacists, not only in advising on the treatment of symptoms of self limiting ailments but also in activities designed to promote good health, must be tapped for the future benefit of the NHS. Doctors, pharmacists, and other members of the health care team need to coordinate their activities and ensure that the advice given by various sectors of the health service is consistent.

JOHN FERGUSON

Secretary and registrar,
Royal Pharmaceutical Society of Great Britain,
London SE1 7JN

1 Rawlins MD. Extending the role of the community pharmacist. *BMJ* 1991;**302**:427-8. (23 February.)

Child health computing

SIR,—Mr D J Hewitt's response[1] to the editorial by Drs Euan Ross and Norman Begg on child health computing[2] suggests that his interest in health information, like that of most NHS management, is limited to that necessary for "purchasing" or invoicing. Most of the present impetus for better information systems in the NHS is driven by these requirements. This is not much comfort to doctors in public health medicine or community paediatrics, who need good population data.

The child health system is much more than a call and recall system. It holds a record of the child's development from birth to school leaving age, details of immunisation state, and other information such as special needs—for example, handicapping conditions. This constitutes a huge databank on the child population that is just starting to be exploited by paediatric epidemiologists.

To suggest that all that community paediatricians need is historical data from general practitioners carrying out child health surveillance shows a lack of understanding of the information needs of community paediatricians (and an unrealistic expectation of general practitioners).

A ABRA

Department of Child Health,
St Richard's Hospital,
Chichester,
West Sussex

1 Hewitt DJ. Child health computing. *BMJ* 1991;**302**:409-10. (16 February.)
2 Ross E, Begg N. Child health computing. *BMJ* 1991;**302**:5-6. (5 January.)

Childhood immunisation

SIR,—Dr Peter T Rudd emphasises the importance of the new general practitioner contract in achieving better protection of children against infectious diseases.[1] The contract, introduced on 1 April 1990, includes a target payment system in an attempt to boost vaccine uptake. Unfortunately this new system, which replaces the old item of service payments, includes two anomalies that unnecessarily threaten the success of the programme; they would require only minor contractual modifications to be completely rectified.

General practitioners can no longer be paid for giving pertussis immunisation to a child after the third birthday or for giving measles, mumps, and rubella immunisation to children between the third and sixth birthdays. Before this new contract they were paid item of service fees for giving these immunisations at these ages. Nothing has changed in the interim to make them any less important; indeed there is increasing recognition of the need for high uptake of immunisation at all ages.[2] There is no medical reason why these anomalies should persist. It is our belief that they exist because of administrative error rather than medical intent, yet requests for modification have thus far been rejected. If measles, mumps, and rubella immunisation can be justified in a 6 year old why not in a 4 year old? If pertussis immunisation can be justified in a one year old why not in a 3 year old? Although whooping cough is a less serious infection in older children, complications do occur in this group, and these children can act as a source of infection for younger siblings.

There are two possible solutions to this problem. An amendment to the contract could allow directors of public health to authorise payment of general practitioners by health authorities on an item of service basis for immunising children outside the currently recognised age bands. Alternatively, on a national basis, item of service payments could be extended for these vaccines to any age up to 18 years. The first would be the simplest to bring into effect, but the second would offer a national solution that avoids the obvious drawbacks of regional variations in immunisation practice.

The Joint Committee on Vaccination and Immunisation and the Department of Health would do well to examine this situation and rectify the anomalies as soon as possible. Efforts to eradicate these infections should not be hampered by unnecessary obstacles.

DREW WALKER
DONALD COID
I G JONES

Fife Health Board,
Glenrothes,
Fife KY7 5PB

1 Rudd PT. Childhood immunisation in the new decade. *BMJ* 1991;**302**:481-2. (2 March.)
2 Department of Health, Hong Kong. Expanded programme on immunisation—measles outbreak. *Weekly Epidemiological Record* 1990;**49**:379-81.

SIR,—Dr Peter Rudd's editorial rightly emphasises that immunisation rates in the United Kingdom are presently at record levels,[1] but we question the validity of attributing the reasons given—introduction of immunisation targets into the general practitioner contract, the publication of a guide to immunisation by the Department of Health,[2] and the publication of the British Paediatric Association's manual on infection and immunisation.[3] These are all fairly recent events, whereas immunisation rates in the United Kingdom have been steadily increasing over the past 10 years.

The figure, based on statistics from the Department of Health and the Scottish Office, shows immunisation uptake rates in 1979-89 for children who achieved their second birthday.