used internationally for comparative purposes and, with full histopathological examination (as in our paediatric and adult studies), provide information significantly superior to clinical data alone.³ We acknowledge that necropsies underestimate bacteraemia and enteritis.^{2,4} Pyogenic pneumonia (diagnosed on the basis of large zones of lungs with polymorphs in alveoli) was the prime cause of death in 32% (49/155) of the children and was found in 37% (57/155); the corresponding proportions in the adults infected with HIV were 8% and 30%, respectively.²

With regard to differences between adults and children, the common diseases in childhood in Africa (acute respiratory infection, malnutrition, meningitis, etc) were found frequently in both HIV positive and HIV negative children. Clinical syndromes are similar in the two groups, and symptoms and signs are poorly predictive of HIV status.⁵ With the exception of *Pneumocystis carinii* infection, individual AIDS defining infections were uncommon in HIV positive children. In contrast, the range of disease in HIV positive adults in Abidjan is quite different from that in HIV negative adults,² as is the case in Nairobi.

The rarity of tuberculosis in the young children in whom necropsy was carried out is consistent with the annual risk of infection with *Mycobacterium tuberculosis* in sub-Saharan Africa—about 2%. We predict that, with a median age at death of <2 years, most African children with HIV infection die without having encountered this mycobacterium. We were not reluctant to emphasise this but believed that the implications were evident.

Finally, the 1991 article by Chin that we referenced emphasises the prevalence of HIV infection in Africa. Other articles by the same author include projections beyond 1991, which we could have cited.

SEBASTIAN LUCAS
Professor

Department of Histopathology,
United Medical and Dental Schools of Guy's and
St Thomas's Hospitals,
St Thomas's Hospital,
London SE1 7EH

KEVIN M DE COCK
Senior lecturer

Department of Clinical Sciences,
London School of Hygiene and Tropical Medicine,
London WC1E 7HT

- 1 De Cock KM, Barrere B, Diaby L, Lafontaine M-F, Gnaore E, Porter A, et al. AIDS—the leading cause of adult death in the west African city of Abidjan, Côte d'Ivoire. *Science* 1990;249:793-6.
- 2 Lucas SB, Hounnou A, Peacock CS, Beaumel A, Djomand G, N'Gbichi J-M, et al. The mortality and pathology of HIV disease in a west African city. *AIDS* 1993;7:1569-79.
- 3 Wilkes MS, Felix JC, Fortwin AH, Godwin TA, Thompson WG. Value of necropsy in acquired immunodeficiency syndrome. *Lancet* 1988;iii:85-8.
- 4 Lucas SB, De Cock KM, Hounnou A, Peacock CS, Diomandé M, Hondé M, et al. Contribution of tuberculosis to slim disease in Africa. *BMJ* 1994;308:1531-3.
- 5 Vetter KM, Djomand G, Zadi F, Diaby L, Brattegaard K, Timite M, et al. Clinical spectrum of HIV disease in children in a west African city. *Pediatr Infect Dis J* (in press).

Fewer needlestick injuries than expected occurred during immunisation campaign

EDITOR,—The measles and rubella immunisation campaign in 1994 was the biggest mobilisation of immunisation services ever undertaken in Britain. This presented an opportunity to identify the rate of needlestick injuries and hepatitis B immunisation status during an immunisation campaign in staff working in the Southwark and Lewisham boroughs of London.

Questionnaires were distributed to 42 nurses and 29 doctors who immunised children during the campaign. The response rate was 67% (n=28) for nurses and 90% (n=26) for doctors. Seven nurses and five doctors reported sustain-

ing a "clean" needlestick injury. Two nurses and three doctors reported sustaining a needlestick injury after the needle had been used on a child. Only one doctor and one nurse, who were both immune to hepatitis B, reported their injuries to occupational health staff and completed an accident form. The remaining three injuries were sustained by two nurses and one doctor, none of whom knew their immune status or had been tested for antibodies to hepatitis B virus in the previous three years.

Twenty three of the health care professionals (16 (57%) nurses and seven (27% doctors)) were uncertain of their immunity to hepatitis B. Five doctors and one nurse thought that they were immune, but they had not had their antibody status checked in the past three years. This raises the proportion of professionals who were uncertain about their hepatitis B status to 54%. The staff's immunity to hepatitis B was not assessed at the start of the campaign. With hindsight, it should have been, but the campaign was organised without the six months' notice that may be necessary for protection after immunisation.

Needlestick injuries continue despite efforts to educate staff,^{1,2} and underreporting of needlestick injuries is well recognised.³ The immunisation campaign was a stressful change of routine for staff and was thus expected to result in a high rate of needlestick injuries; this expectation was not borne out by our survey, and the rate of "dirty" needlestick injuries was not high.

The problems that arise from needlestick injuries are hidden costs of immunisation programmes. The risk of hepatitis B can be avoided, but the risk of HIV infection remains, with consequent anxiety.

ANN R HAIRE
Medical officer in educational medicine
A SHARMA
Consultant community paediatrician

Sheldon Children's Centre,
London SE5 7RN

- 1 Mercier C. Reducing the incidence of sharp injuries. *British Journal of Nursing* 1994;17:897-900.
- 2 Waldron HA. Needlestick injuries. *BMJ* 1992;304:975.
- 3 McCormic RD, Maki DJ. Epidemiology of needlestick injuries in hospital personnel. *Am J Med* 1981;70:928-32.

Junior doctors' pay rates for additional duty hours have not been increased

EDITOR,—Linda Beecham's article about this year's pay award for junior doctors is potentially misleading since, although she reports "the proposed reduction in the payment for additional duty hours to 50% of basic pay for all grades," she does not make clear that this is to apply only to low intensity on call rotas.¹

The Junior Doctors Committee's evidence to the Doctors' and Dentists' Review Body pointed out the low morale among junior doctors, and we are pleased to have been singled out for favourable treatment this year. The review body recommended a 5.3% pay increase for all junior doctors, with junior and senior house officers receiving a 6.8% increase to compensate for the fact that their rate for additional duty hours for on call work will return to 50% after last year's experiment with a rate of 52.5%. The rates for partial and full shifts remain 70% and 100% respectively. The rise of 5.3% was the highest recommended for any group of health care workers and is considerable higher than that recommended for consultants or nurses, in addition to being substantially above the rate of inflation.

While this is good news for junior doctors, we are disappointed that the review body again refused to increase the pay rates for additional duty hours. The Junior Doctors Committee's

policy for many years has been that out of hours work should attract a salary of no less than the standard rate, with higher work intensity being rewarded with rates higher than 100%, but the review body persistently fails to accept our case.

After protracted negotiations, however, we have finally reached agreement with the Department of Health that high intensity on call rotas should be paid at the same rate as partial shifts. Since April, juniors are able to claim payment at 70% rather than 50% for an on call rota in which the work intensity is comparable to that of a partial shift. In return, they will have to agree to look at ways of changing the working pattern to reduce the intensity, but they will not be compelled to change over to an unacceptable partial shift.

PETER BENNIE
Chairman, Junior Doctors Committee negotiating subcommittee

9 Prospect Avenue,
Cambuslang,
Glasgow G72 8BW

- 1 Beecham L. Government phases NHS doctors' pay award. *BMJ* 1996;312:395. (17 February.)

Primary care out of hours

Emergency centre in Midlothian is successful

EDITOR,—Val Lattimer and colleagues report enthusiasm for emergency centres in primary care¹ but, given the impetus provided by the deal over out of hours work,² urge that such initiatives are evaluated. We report a preliminary evaluation of a centre used for out of hours work and minor injuries, which is funded by the Scottish Office and Lothian Health.

Esk Valley emergency services opened in April 1995 in semirural Midlothian, where 58 000 patients are registered with eight practices (36 principals). The rate of night visits in 1994-5 was 46/1000 patients. The centre has reception, nursing, and driving staff as well as medical cover (two general practitioners for evenings and weekends; one general practitioner from mid-night).

The Scottish Office commissioned the department of general practice at the University of Edinburgh to evaluate this pilot service. Information is being collected on activity, patients' satisfaction, and general practitioners' stress. Comparison of activity data is problematic as data were underrecorded in February and March 1995 (nights for which no contacts were recorded for practices were therefore excluded); in addition, April 1995 to January 1996 included an unusually busy winter.

Before the centre opened 1409 (63%) of the 2236 patients who contacted their practice out of hours were visited; after the centre opened 2524 (20%) of the 12 620 who contacted it were visited (table 1). Altogether 43% of the patients who contacted the centre attended it; this figure

Table 1—Comparison of activity before and after introduction of out of hours service

	Before	After
Annual rate of contact/1000 patients	265	303
No of patients contacting practice or centre*	2236	12620
No (%) of patients:		
Visited at home	1409 (63)	2524 (20)
Seen at surgery or centre	179 (8)	5427 (43)
Given advice over telephone	648 (29)	4669 (37)

*Data on contacts before introduction of service were collected from 14 February to 23 April 1995; those on contacts after introduction of service were collected from 24 April 1995 to 11 January 1996.

is higher than reported elsewhere.^{3,4} Although the total number of contacts per 1000 patients has risen, the number of patients seen per 1000 patients has remained constant. As the general practitioners make fewer visits, however, they find the workload easier to cope with.

Of 360 patients who attended the centre, 331 said that they were happy to travel to it, 245 having travelled under 3.2 km and four over 8 km. Two hundred and eighty patients had reached the centre in under 10 minutes. Altogether 217 had travelled in their own car and 71 had been given a lift. Two hundred and thirty one patients thought that the new service was better than the old, 65 that it was about the same, and 11 that it was worse; 53 were not sure.

The 36 participating doctors were sent questionnaires in June. All 29 respondents thought that the scheme was succeeding "very much" as opposed to "to some extent" or "not really." Most felt safer on call and found the support of a nurse useful.

These preliminary results should provide encouragement for those who are changing out of hours services.

DAVID HEANEY
Research associate

Department of General Practice,
University of Edinburgh,
Edinburgh EH8 9DX

DERMOT GORMAN
Consultant in public health medicine

Lothian Health,
Edinburgh EH8 9RS

- 1 Lattimer V, Smith H, Hungin P, Glasper A, George S. Future provision of out of hours primary medical care: a survey with two general practitioner research networks. *BMJ* 1996;312:352-6. (10 February.)
- 2 Dorrell S. *Out of hours*. London: Department of Health, 1995. (Letter to GMS, BMA.)
- 3 Hallam L, Cragg D. Organisation of primary care services outside normal working hours. *BMJ* 1994;309:1621-3.
- 4 Cragg DK, Campbell SM, Roland MO. Out of hours primary care centres: characteristics of those attending and declining to attend. *BMJ* 1994;309:1627-9.

Emergency referral letters from deputising doctors need to be improved

EDITOR,—Clearly, the service provided out of hours by general practitioners must be restructured if it is to remain of high quality. Various options are being considered, including co-operatives and overnight medical centres. In their survey Val Lattimer and colleagues found that general practitioners were keen to try these options.¹ The new agreement gives doctors the opportunity to transfer their out of hours responsibility to a deputising service.² This service will still be needed, no matter which options become established. We need, however, to ask whether the deputising service is of sufficient quality to provide out of hours cover.

One way of assessing the quality of the service is to compare the content and quality of emergency referral letters from deputising doctors and general practitioners. Over one month in 1995 five independent observers at the Royal Alexandra Hospital in Paisley were asked to analyse the referral letters for emergency surgical patients; they were not aware that general practitioners were being compared with deputising doctors. Sixty six letters from general practitioners and 50 from deputising doctors were analysed for the presence of points such as the patient's name, age or date of birth, an accurate drug history, and vital signs. Additionally, the number of words in the letters was counted and legibility assessed subjectively (as legible, partially legible, or illegible).

The patient's name was recorded in all of the letters, and age or date of birth was recorded in over 90% in both groups (63 (95%) from general

practitioners, 46 (92%) from deputising doctors). At least one vital sign was recorded in 33 (50%) letters from general practitioners and 24 (48%) from deputising doctors. When compared with letters from general practitioners those from deputising doctors tended to be illegible (24 (48%) were assessed as illegible v 9 (14%) from general practitioners, $P<0.01$); much shorter (30 words v 67 words, $P<0.01$); less likely to record an accurate drug history (17 (34%) recorded an accurate drug history v 46 (70%), $P<0.01$); and to be anonymous (38 (76%) v 16 (24%), $P<0.01$).

Our study indicates that the quality of referral letters from deputising doctors is suboptimal, with three quarters being anonymous, two thirds lacking an accurate drug history, and one half being illegible. Referral letters have a major role in communication between doctors and are an important aspect of quality of care.^{3,4} This aspect of health care provided by the deputising service needs to be improved.

JOHN WRIGHT
Locum, staff grade

Department of Accident and Emergency,
Royal Alexandra Hospital,
Paisley PA2 9PN

NEERAJ PRASAD
Registrar in cardiology

Stobhill Hospital,
Glasgow G21 3UW

GRAHAM DALRYMPLE
General practitioner

Abbey Medical Centre,
Paisley

- 1 Lattimer V, Smith H, Hungin P, Glasper A, George S. Future provision of out of hours medical care: a survey with two general practitioner research networks. *BMJ* 1996;312:352-6. (10 February.)
- 2 Hurwitz B. The new out of hours agreement for general practitioners. *BMJ* 1995;311:824.
- 3 Marinker M, Wilkin D, Metcalfe DH. Referral to hospital: can we do better? *BMJ* 1988;297:461-4.
- 4 Lloyd BW, Barnett P. Use of problem lists in letters between hospital doctors and general practitioners. *BMJ* 1993;306:247.

Health promotion in primary care

Scheme should be comprehensively reviewed

EDITOR,—Stephen Gillam and colleagues are right to question the recent modifications to the health promotion package for general practice.¹ I believe, however, that they have failed to identify the changes that could make the scheme worth while.

The package, which was introduced in 1993, was a curious mishmash of data collection, primary prevention, secondary prevention, and management of chronic disease. Some excellent ideas were concealed among the mass of requirements, which seemed designed to irritate, depress, and antagonise general practitioners. We know that primary prevention in a one to one consultation is a thankless and largely unsuccessful task and that collection of data cannot be a serious priority in an overloaded schedule. Management of chronic disease and its corollary, secondary prevention, are, however, the stuff of general practice, requiring a meld of clinical skills, rapport with patients, and family medicine. Unlike primary prevention, secondary prevention is highly effective. Why did the long term management of asthma and diabetes qualify for special payment while the care of patients with coronary heart disease and hypertension was relegated to band 2, lost among such dubious activities as the recording of patients' height and weight and exercise habit?

As Gillam and colleagues suggest, the scheme should be comprehensively reviewed. The

category of management of chronic disease should be expanded to include coronary disease and hypertension, and guidelines for the care of patients with these diseases could be produced in the same way as has been done so successfully for asthma and diabetes mellitus. It would be reasonable to expect new money to pay for this. If such payment were not forthcoming it could be taken from the banding system, which itself could be reduced to the recording of attempts to identify hypertensive patients and to reduce smoking and excessive alcohol consumption.

HUGH BETHELL
General practitioner

Health Centre,
Alton,
Hampshire GU34 2QX

- 1 Gillam S, McCartney P, Thorogood M. Health promotion in primary care. *BMJ* 1996;312:324-5. (10 February.)

Scheme has been a disaster

EDITOR,—Stephen Gillam and colleagues' editorial on the recording of health promotion activity arrives at a broadly correct conclusion by a route that ignores the present political context of the discredited banding scheme in general practice.¹ General practitioners began to see the need to offer health promotion to their patients during the 1980s, and some exciting developments followed, in the best tradition of general practice. Unfortunately, 1990 saw the introduction of the "10 patients per health promotion clinic scheme," which was superseded by the banding scheme—a bureaucratic exercise to collect data that has little scientific basis. The scheme recycles existing income for general practitioners in exchange for data of little value to those who amass them. Far worse, even enthusiastic general practitioners who are prepared to accept responsibility for a "population focus" to their clinical work see little benefit to their practice populations or, indeed, to individual patients resulting from their efforts because of the flawed nature of the scheme.

So discredited has the banding scheme become that the secretary of state for health has already agreed to abandon a large number of data collection fields. General practitioners and members of primary health care teams believe that it is time to abandon the reporting requirements and acknowledge the failure of the system.

General practitioners remain committed to their role in improving the health of their patients and playing their part in furthering the targets set in the Health of the Nation. In the context of developing a primary care led NHS, however, both the profession and the government need to learn lessons from the disaster of health promotion. Firstly, the clinical activity must be based on evidence of effectiveness, much of which is still contentious in the "young science" of health promotion. Secondly, new work requires new money. Finally, accountability needs to rest more on professionalism than on senseless bureaucracy.

This does not mean that general practitioners will have abandoned health promotion, which is a contractual responsibility for them on an opportunistic basis. The most important opportunities for health promotion interventions are presented by everyday consultations, when they may be related to the patient's concern about present illness, the perceived risk of illness, or the experience of ill health in the family.

JUDY A GILLEY
Joint deputy chairperson,
General Medical Services Committee

Cornwall House Surgery,
London N3 1LD

- 1 Gillam S, McCartney P, Thorogood M. Health promotion in primary care. *BMJ* 1996;312:324-5. (10 February.)