Letters

Bureaucracy of purchaser-provider split delays treatment

EDITOR—Before the National Health Service and Community Care Act 1990 came into force,[1] general practitioners were free to refer their patients to the consultant of their choice at any hospital. Our general practitioner referrals were categorised rapidly by medical staff as urgent, soon, or routine, and the clinic reception staff organised outpatient appointments generally within one week, two weeks, or 12 weeks, respectively, in our department.

Since that act came into force, a new bureaucracy has been created to deal with those referrals made by non-fundholding general practitioners to their first choice of consultant when the consultant's hospital is outside the "contracting zone" of the patient's local health authority. Sometimes these patients live within 1.6 km of the hospital. This bureaucracy involves several extra tiers of administration which the referral process must negotiate, such as our trust's "safe haven" (a new department created in 1990 to deal with purchasing authorities) and clerical staff at the purchasing health authority.

We carried out a study to quantify delays in outpatient appointments caused by the new bureaucracy. In 1996, 119 patients whose health authority ultimately refused to fund a new outpatient appointment were referred to the oral and maxillofacial surgery department of the Royal Hospitals Trust. Our practice manager recorded the date of receipt of the referral letter and the date that the health authority notified our trust of its refusal to authorise the appointment. The mean delay between these two dates was calculated for all 119 patients and was found to be 135 days for routine referrals (table 1).

During the delay documented in this study the referring general practitioner, the hospital consultant, and the patient have no idea about the fate of the referral. At the end of the mean period of 135 days (more than 19 weeks) the patient still does not have an outpatient appointment to deal with the problem.

Table 1 Mean delay between patient being referred to consultant and trust being notified that health authority had refused to authorise referral

Category of referral	No of patients	Delay (days)	
		Mean	Range
Routine	103	135	8-362
Soon	15	109	13-263
Urgent	1	151	

This bureaucratic delay contravenes two standards in the patient's charter.[2]

- "From April 1995, when your GP or dentist refers you to the hospital, 9 out of 10 people can expect to be seen within 13 weeks."[2] But our patients waited for 19 weeks to be refused to be seen.
- "To be referred to a consultant acceptable to you when your GP thinks it necessary."[2] Non-fundholding general practitioners are no longer free to refer to the consultant of their choice despite Kenneth Clarke's reassurances as secretary of state for health in 1990.[3]

This study shows that the government's reforms have created inefficiency where none existed before and have raised costs by necessitating the employment of new clerical staff to deal with the increased administration.

Iain Hutchison *Consultant*
Peter Hardee *Higher surgical trainee*
Catherine Barns *Practice manager*
Department of Oral and Maxillofacial Surgery, Royal Hospitals NHS Trust, London E1 1BB

1 National Health Service and Community Care Act 1990. London: HMSO, 1990.
2 Department of Health. *Patient's charter*. London: Department of Health, 1995.
3 Beecham L. Ms Harman and Mr Clarke clash on NHS bill. *BMJ* 1990;300:949.

Counting the cost of social disadvantage in primary care

Conclusions arising from economic evaluations in primary care should be treated with caution

EDITOR—Adrian Worrall and colleagues' paper costing the increased workload caused by social disadvantage has important resource implications but exposes the danger of a superficial approach to health economics.[1] The cost of a consultation in general practice is a key input for primary care studies, and by taking at face value Netten and Dennett's frequently quoted figure of £16[2] Worrall and colleagues fall into the common trap of failing to appreciate context, definition, and interpretation when analysing costs.

Netten and Dennett's analysis is based on the work of Hughes, who assumed that half of a general practitioner's working time was spent in the consultation.[3] In fact, however, if the workload survey for 1992-3 is used,[4] and if an hour a day is allocated for case work arising from the consultation, this figure will be above 70%. Information on lengths of consultation and home visits are taken from data that are over 10 years old. Furthermore, Netten and Dennett's analysis is based on a general practitioner's gross direct and indirect remuneration. This will include reimbursement for dispensing doctors, who do not exist in London, and also practice nurses. The costs of practice nurses will therefore have been counted twice in this study.

The economic analysis in this paper shows two important points. Firstly, data on local costs should be used for local studies, with the costs of a consultation in general practice based on the individual practices' general medical services income and consultation characteristics. Secondly, the methodological framework for evaluating costs in general practice is poorly defined, and conclusions arising from economic evaluation in primary care should be treated with caution.

D P Kernick *General practitioner*
St Thomas Health Centre, Exeter EX4 1HJ

Advice to authors

We receive more letters than we can publish: we can currently accept only about one third. We prefer short letters that relate to articles published within the past four weeks. We also publish some "out of the blue" letters, which usually relate to matters of public policy.

When deciding which letters to publish we favour originality, assertions supported by data or by citation, and a clear prose style. Letters should have fewer than 400 words (please give a word count) and no more than five references (including one to the BMJ article to which they relate); references should be in the Vancouver style. We welcome pictures.

Letters should be typed and signed by each author, and each author's current appointment and address should be stated. We encourage you to declare any conflict of interest. Please enclose a stamped addressed envelope if you would like to know whether your letter has been accepted or rejected.

We may post some letters submitted to us on the world wide web before we decide on publication in the paper version. We will assume that correspondents consent to this unless they specifically say no.

Letters will be edited and may be shortened.

1 Worrall A, Rea JN, Ben-Shlomo Y. Counting the cost of social disadvantage in primary care: retrospective analysis of patient data. *BMJ* 1997;314:38-42. (4 January.)
2 Netten A, Dennett J. *Unit cost of community care.* University of Kent: Personal Social Services Unit, 1995.
3 Hughes D. Costing consultation in general practice: towards a standardised method. *Fam Pract* 1991;8:388-93.
4 Department of Health and General Medical Services Committee. *General medical services workload survey 1992/93.* London: GMSC, 1994.

Authors excluded people who should have been included

Editor—Adrian Worrall and colleagues' paper on social disadvantage and the cost of providing primary care is misleading.[1] "Ghosts" are not generally either disembodied or figments of the general practitioner's imagination. They are mostly healthy people who have moved away but not yet registered with a new general practitioner. In most practices they will be matched by another group of healthy patients who have moved into the area but not yet registered with the local practice. If Worrall and colleagues wish to exclude from their calculations the undemanding patients who have moved out of the area they should also include the undemanding patients who have moved into the area and made no contact with the practice. This, of course, is difficult to do because one doesn't know who they are.

The authors acknowledge that their study was underrepresentative of male subjects aged 15-44 and that this group has the highest list inflation rate. This group is also the one that makes least demands of the health service. Thus the authors seem to have excluded a considerable number of healthy, or at least undemanding, patients.

It also seems irrelevant to comment that distance of residence from the practice had no effect when 86% lived within 1.6 km. In south Shropshire patients may live more than 16 km from the practice and 48 km or more from the district general hospital, and have no bus service.

Charles A West *Lead doctor, South Shropshire Commissioning Group*
Medical Centre, Church Stretton, Shropshire SY6 6BL

1 Worrall A, Rea JN, Ben-Shlomo Y. Counting the cost of social disadvantage in primary care: retrospective analysis of patient data. *BMJ* 1997;314:38-42. (4 January.)

Authors' reply

Editor—Ideally all local studies should use local cost estimates, but deriving local unit costs would have been prohibitively time consuming for our study. We justify using Netten and Dennett's estimates of costs by the results of comparing the total income of the practice with what would be predicted from these estimates and our observed rates of clinical contact. Our estimates were closely in line with practice income, which makes us confident that the costs are reasonable estimates for the practice concerned. Should national differences need to be calculated we agree that information from the general medical services survey should be used and adjustments made for the costs of dispensing and practice nurses. According to Netten (personal communication), these revised figures for the cost of a consultation with a general practitioner at the surgery would be £10-11 and the cost of a home visit would be £30-33. Our unit costs may be higher than these national estimates because of the higher staff wages and practice expenses in London.

A recent article reviewed 20 studies that had referred to the unit cost of a consultation with a general practitioner and estimated a lower average cost than the figures above.[1] Although we have some reservations about how this figure was calculated, a central aspect of estimating costs that Netten points out is that costs do and should vary according to the purpose of the exercise—there is no gold standard. This need not deter general practitioners from making local cost estimates with costs calculated elsewhere, as long as there is some local validation.

Charles A West assumes that incoming migrants are undemanding. This is not, however, supported by empirical evidence, which shows no difference in general practitioners' workload for patients who had moved in the year preceding the census compared with non-migrants.[2] Exclusion of these patients should therefore not have altered the results.

We agree that male subjects aged 15-44 are less demanding and hence our average workloads may have been slightly too high. This group was underrepresented, but there did not seem to be any systematic bias by social class as the distribution of our patients was fairly similar to that of census data. This should therefore not have biased the relative differences, which were our main interest.

Finally, the importance of distance of residence from the practice is clearly different for urban compared with rural practices, but we did not claim that our results would be generalisable to other practices, particularly those based in non-urban centres.

Adrian Worrall *Research officer*
Nicolas Rea *General practitioner*
Kentish Town Health Centre, London NW5 2AJ

Yoav Ben-Shlomo *Senior lecturer in epidemiology*
Department of Social Medicine, Bristol University, Bristol BS8 2PR

1 Graham B, McGregor K. What does a GP consultation cost? *Br Gen Pract* 1997;47:170-2.
2 Ben-Shlomo Y, White I, McKeigue PM. Prediction of general practice workload from census based social deprivation scores. *J Epidemiol Community Health* 1992;46:532-6.

Community mental health teams in London are being increasingly stretched

Editor—Max Marshall's editorial on the report *London's Mental Health* correctly identifies the unique set of socioeconomic problems facing the capital, and its correspondingly high levels of mental illness.[1,2] He rightly draws attention to the crisis and threatened collapse of the city's mental health services, which are faced with rising bed occupancy, increasing violence, and the haemorrhage of funds through extracontractual referrals and the provision of hotel services.

Marshall writes that the report is "less successful in establishing how far community services are under pressure." In Tower Hamlets—London's most deprived borough—community mental health teams operate under extreme pressure to provide care and treatment to a population with proved high levels of morbidity. Laugharne found that in one of the borough's localities 47% of the community mental health teams' current caseload for which data were available met the Department of Health's criteria for inclusion on the supervision register.[3,4]

We recently surveyed general practitioners in Tower Hamlets to establish their attitudes towards, and their evaluation of, community mental health services. Forty nine (47%) of 104 general practitioners returned questionnaires. While most (38) respondents found community mental health teams' services useful, 29 also described themselves as dissatisfied. In contrast with these findings, we found that 42 respondents found clinical and counselling psychology services to be useful. Psychologists, unlike community mental health teams in Tower Hamlets, are aligned to primary care practices and offer short term psychotherapy to non-psychotic patients. Additional comments by general practitioners indicated that some would like similar primary care alignment for all community mental health professionals, while others thought that they had lost a previously valued counselling service based on the community mental health team.

In our opinion, many community mental health teams now find themselves in an increasingly impossible position. In an area of high morbidity the Department of Health's requirement that care must be prioritised for people with serious mental illnesses stretches community services to the limit on its own. When primary care colleagues require the additional provision of mental health interventions for their less disabled patients the opposing demands threaten to overwhelm and dislocate community care for people with mental ill health unless extra resources are found.

Ben Hannigan *Community mental health nurse*
Bow and Poplar Community Mental Health Team, St Paul's Way Medical Centre, London E3 4AJ

Richard Laugharne *Senior registrar in psychiatry*
St George's Medical School, London SW17 0RE

Anna Stafford *Care programme approach coordinator*
Royal London Hospital (St Clement's), London E3 4LL

1 Marshall M. London's mental health services in crisis. *BMJ* 1997;314:246. (25 January.)
2 King's Fund. *London's mental health.* London: King's Fund, 1997.
3 Laugharne R. Implications of supervision registers in psychiatry. *BMJ* 1994;309:1159.
4 NHS Management Executive. *Introduction of supervision registers for mentally ill people from 1 April 1994.* London: NHSME, 1994. (HSG(94)5.)

Cervical screening

Rate of diagnosis of cytological abnormalities is best end point

Editor—Frank Buntinx and Marleen Brouwers report a meta-analysis examining randomised and quasi-randomised studies of 85 000 patients to assess the relation between the detection of abnormality in cervical smears and the sampling device used.[1] They recommend the use of an extended tip spatula, a spatula with a brush or cotton swab, or a Cervex brush. We have performed a retrospective analysis of 126 608 smears submitted to our laboratory by general practitioners and family planning clinics.[2] We compared the rate of detection of cytological abnormalities associated with the three most popular devices: the spatula alone (predominantly Aylesbury spatulas), the Cervex brush, and a combination of a spatula and brush. Table 1 shows the results (presented with the permission of the editor of *Cytopathology*). The results obtained with the Cervex brush were different from those obtained with the other techniques: the brush produced a higher proportion of satisfactory smears but a lower rate of diagnosis of cytological abnormality.

In his editorial Peter Sasieni comments that the diagnosis of abnormalities in cervical smears is not an ideal indicator of the usefulness of a sampling device; he would prefer to consider the number of women treated for histologically confirmed high grade dysplasia.[3] In a large community based study such as ours few women will undergo biopsies or have high grade dysplasia. The rate of diagnosis of cytological abnormalities is probably the best end point that can practicably be achieved. We have shown a high degree of correlation between cytological and histological diagnoses in our area.[4]

Our study differs from the randomised studies examined by Buntinx and Brouwers because of its retrospective nature, but we were able to evaluate a large number of smears—more than the total considered in the 28 papers that Buntinx and Brouwers looked at. We suggest that our large numbers and the use of community sources will have reduced bias and reflected the day to day use of these instruments.

Sophia Williamson *Senior registrar in histopathology*
Freeman Hospital, Newcastle upon Tyne NE7 7DN

Viney Wadehra *Consultant cytopathologist*
Newcastle General Hospital, Newcastle upon Tyne NE4 OBE

Table 1 Quality of smears obtained and abnormalities diagnosed with three sampling devices. Figures are numbers (percentages)

	Spatula	Cervex brush	Spatula and brush combined
Total No of smears	97 863	14 546	14 199
Unsatisfactory smears	8153 (8.3)	827 (5.7)	1154 (8.1)
All abnormalities*	7151 (7.3)	992 (6.8)	1165 (8.2)
Squamous dyskaryosis*	2604 (2.7)	321 (2.2)	409 (2.9)

*Includes borderline abnormalities.

1 Buntinx F, Brouwers M. Relation between sampling device and detection of abnormality in cervical smears: a meta-analysis of randomised and quasi-randomised studies. *BMJ* 1996;313:1285-90. (23 November.)
2 Williamson SLH, Hair T, Wadehra V. The effects of different sampling techniques on smear quality and the diagnosis of abnormalities in cervical screening. *Cytopathology* (in press).
3 Sasieni P. Cervical sampling devices. *BMJ* 1996;313:1275-6. (23 November.)
4 Beeby AR, Keating PJ, Wagstaff TI, Wilson EMJ, Simms PF, Manning PJ, *et al.* The quality and accuracy of cervical cytology: a study of five sampling devices in our colposcopy clinic. *J Obstet Gynaecol* 1993;13:276-81.

Large mismatch exists between cancers and surrogate end points

Editor—Peter Sasieni is right to remind us that surrogate end points in cervical screening are imperfect.[1] Do purchasers, providers, and consumers (the women themselves) realise just how imperfect? Figure 1 shows that even the best surrogate—the number of women treated for the highest grade of cervical intraepithelial neoplasia—inevitably results in overtreatment, which would not occur if there was a better surrogate. Many additional women are treated for lower grades of intraepithelial neoplasia or none, although these data are not available.

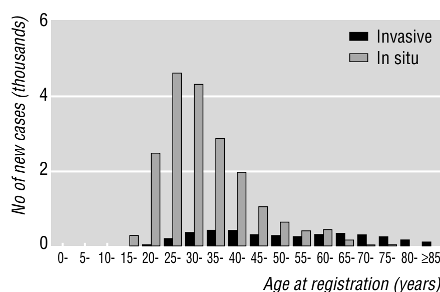

Fig 1 Mismatch between cases of invasive carcinoma of the cervix and its surrogate end point, carcinoma in situ. Figures are numbers of new cases registered in 1991 by age[2]

We should not underestimate the magnitude of the mismatch, in numbers and distribution, that exists between surrogate end points and the cancers we are trying to prevent. As figure 1 shows, the burden of this mismatch is borne largely by the youngest women, who have the lowest risk of cervical cancer. Stjernswärd of the World Health Organisation has referred to the "dysplasia swamp" towards which cervical cytology screening leads and has warned countries that are developing their own cancer prevention programmes not to be trapped in this swamp (Women's Nationwide Cancer Control Campaign 30th anniversary symposium, London, 6 May 1995). What information should we be offering to women in Britain?

C Mary Anderson *General practitioner*
Heaton Moor Medical Centre, Stockport SK4 4NX

1 Sasieni P. Cervical sampling devices. *BMJ* 1996; 313:1275-6. (23 November.)
2 2 NHS Cervical Screening Programme. *Cervical screening. A pocket guide.* Sheffield: NHSCSP, 1996.

Effect of screening may be being underestimated

Editor—Peter Sasieni claims that 2000 cases of invasive cervical cancer are being prevented by screening each year.[1] The true figure could be more than three times that number.

In Southampton alone, with a total female population of 223 000, more than 200 cases of cervical intraepithelial neoplasia grade III are detected and successfully treated each year. The annual figures for 1990-1 through to 1995-6 were 257, 240, 226, 202, 234, and 239, respectively, giving a rough incidence of 100/100 000 women (unpublished data). Incompletely treated cervical intraepithelial neoplasia grade III has been shown to progress to invasion in about one third of cases.[2] If it is assumed that no more than 30% of cases show progression, and if we ignore the fact that cervical intraepithelial neoplasia grade II may develop into invasive cancer if left untreated, there would be an additional 30 cases/100 000 in Southampton without screening. If this is added to the 12/100 000 now seen, the incidence would be similar to that seen in countries without screening programmes.

Sasieni's estimate comes from a multicentre audit in which relative risk in women who had and had not been screened in the previous 5.5 years was compared.[3] The audit took place during the prevalence round of screening, when many of the women had been screened only once, and it took no account of screening carried out more than 5.5 years before diagnosis. In Southampton we have reported an almost threefold difference in relative risk between women with no cytology record compared with those screened more than 5.5 years before diagnosis.[4] Women screened more than 5.5 years before diagnosis would have come from a population that included those successfully treated for cervical intraepithelial neoplasia grade III when they were in their 20s and 30s in the 1960s to 1980s.

The NHS cervical screening programme was introduced in a partially screened population in which the underlying risk of invasive cancer was unknown. The risk of invasive cervical cancer and its precursors was rising, particularly in younger women.[5] Although coverage in older women was poor, many women under 40 were screened opportunistically. In Southampton 72% of cases of cervical intraepithelial neoplasia grade III arise in women aged ≤40, which suggests that the success of the opportunistic screening programme before 1988 was underestimated.

If 70 cases of invasive cancer are being prevented each year in Southampton then more than 7000 are being prevented in England as a whole (female population 25 million), even with a conservative estimate of the progression of cervical intraepithelial neoplasia grade III.

Amanda Herbert *Consultant cytopathologist*
Southampton University Hospitals NHS Trust, Southampton General Hospital, Southampton SO16 6YD

1 Sasieni P. Cervical screening devices. *BMJ* 1996;313:1275-6. (23 November.)
2 MacIndoe WA, MacLean MR, Jones RW. The invasive potential of carcinoma-in-situ of the cervix. *Obstet Gynaecol* 1984;64:451-8.
3 Sasieni PO, Cuzick J, Lynch-Farmery E. Estimating the efficacy of screening by auditing smear histories of women with and without cervical cancer. *Br J Cancer* 1996;73:1001-5.
4 Herbert A, Stein K, Bryant TN, Breen C, Old P. Relation between the incidence of invasive cervical cancer and the screening interval: is a five year interval too long? *J Med Screening* 1996;3:140-5.
5 Draper GJ, Cook GA. Changing patterns of cervical cancer rates. *BMJ* 1983;287:510-2.

Home medical students account for less than half the full registrants Britain requires

Editor—The case for an immediate increase in the number of home students training in medicine is irrefutable.[1] There has been a vast increase in the number and proportion of doctors from overseas and from the European Economic Area gaining full registration with the General Medical Council between 1986 and 1995 (table 1).[2]

Table 1 Place of qualification of doctors gaining full registration with General Medical Council in 1986 and 1995

Place of qualification	1986	1995
Britain	3637	3710
European Economic Area	650	1779
Other overseas countries	1664	3327
Total	5951	8818

In 1995 only two fifths of the full registrations were for doctors who qualified in Britain. If all 4119 students who entered British medical schools in 1991[3] qualified and registered we would still produce less than half the full registrants we seem to require. Every year thousands of enthusiastic young people in Britain are being denied access to interesting, well paid, high status jobs. The government should explain to the electorate why these young people are not given the chance to train in medicine. What better time to ask the politicians of all parties to state their case on this subject?

E W L Fletcher *Consultant radiologist*
Radiology Clinical Centre, Oxford Radcliffe Hospital, Oxford OX3 9DU

1 Beecham L. The NHS should not rely on overseas doctors. *BMJ* 1997;314:310. (25 January.)
2 General Medical Council. *Medical register.* London: General Medical Council, 1996:xxiii.
3 Parkhouse J. Intake, output, and drop out in United Kingdom medical schools. *BMJ* 1996;312:885.

Recommendations for improving national data on congenital anomalies are being implemented

Editor—The recent letters about possible changes in the prevalence of gastroschisis highlight the need for good quality national data on congenital anomalies.[1] This was a major concern of the medical advisory committee of the Office of Population Censuses and Surveys (now part of the Office for National Statistics), which set up a working group to review the national system and make recommendations about its future. The working group published a report in 1995, which stated that high quality data on congenital anomalies are needed in order to safeguard the public health and to allow informed decision making for relevant services and a rapid response to public anxieties.[2] It recommended that immediate priority should be given to improving the current system.

Recommendations for improvement included the use of electronic capture of relevant data from notifications of births; incorporating mentions of congenital anomalies into the Office for National Statistics' database of registrations of stillbirths, live births, and infant deaths; and including non-identifiable data from notifications of legal termination of pregnancy on the grounds of a fetal anomaly. Another recommendation was that the Office for National Statistics should collaborate with local registers of anomalies. Such interchanges of information are being pursued and have led to publications describing strengths and weaknesses of the data.

Despite restricted resources, the Office for National Statistics has begun to implement the recommendations and has the basis of a sound national register. Completeness depends entirely on complete ascertainment and reporting at local level. Sadly, these have deteriorated with recent organisational changes. We welcome the acknowledgement of the importance of the national system and hope that professional and managerial bodies will encourage and improve notification.

Eva Alberman *Chair, working group*
Beverley Botting *Director, national congenital anomaly system*
Office for National Statistics, London SW1V 2QQ

1 Congenital anterior abdominal wall defects [letters]. *BMJ* 1997;314:371-3. (1 February.)
2 Office of Population Censuses and Surveys. *The OPCS monitoring scheme for congenital malformations. A review by a working group of the registrar general's medical advisory committee.* London: HMSO, 1995. (Occasional paper 43.)

Crisis in London's mental health services

Empirical evidence was lacking in study

Editor—Given the attention finally being paid to the funding of mental health services, the article by G Shepherd and colleagues came as a great disappointment.[1] Indeed, it is hard to say which was more surprising, the serious methodological limitations of the study or the omission of any reference to these in the discussion. More disturbingly, the authors' conclusions were almost entirely unsupported by empirical evidence.

I should like to draw attention to some of the more glaring problems with this article.

Firstly, the authors fail to acknowledge the possibility of non-response bias. Data on bed occupancy were based on the responses of just 26 out of 42 providers (62%) and data on alternative mental health resources on just 28 respondents. Similarly, neither the size of the target patient population nor the completeness of patient data from responder units was stated. For example, staff may conceivably have been more motivated to record information on patients they believed to be inappropriately placed on acute wards.

Secondly, all of the data were collected by representatives of the provider units. We do not know how many data collectors were recruited in this way or (more importantly) whether any checks were carried out to assess the reliability or validity of ratings obtained in this way. In the absence of independent ratings the possibility of bias in the reporting of, for example, bed occupancy levels cannot be excluded.

I could go on. Instead of qualifying their findings in the light of such limitations, the authors devote their discussion instead to supposition about the optimal provision of mental health services. Quite how they arrive at the conclusion that the relocation of all patients who are inappropriately placed on acute wards would solve the problem of overoccupancy is difficult to comprehend, since no data are presented on the total need for acute care in any of the districts studied. Though most of the views expressed are worthwhile, if polemical, I am sure that many other mental health professionals will have been alarmed to read that "money will not be enough" to solve the problem of our overflowing acute inpatient wards. While there can be little doubt about the need for a spectrum of care, such statements (echoed in Max Marshall's editorial[2]) are likely to give succour to those responsible for the long term and systematic underfunding of mental health services in the United Kingdom.

Scott Weich *Senior lecturer*
University Department of Psychiatry, Royal Free Hospital School of Medicine, London NW3 2PF

1 Shepherd G, Beadsmoore A, Moore P, Hardy P, Muijen M. Relation between bed use, social deprivation, and overall bed availability in acute adult psychiatric units, and alternative residential options: a cross sectional survey, one day census data, and staff interviews. *BMJ* 1997;314:262-6. (25 January.)
2 Marshall M. London's mental health services in crisis. *BMJ* 1997;314:246. (25 January.)

Meeting the needs of people with learning disabilities would unblock acute beds

Editor—We share the view of G Shepherd and colleagues that the shortage of beds in acute psychiatric units is partially related to the long delay of placing patients in appropriate community residential places.[1] Patients with learning disabilities were included in the heterogeneous group of those people unnecessarily occupying acute psychiatric beds.

Unfortunately, the planning and implementation of resettlement of people with

learning disabilities from long stay institutions to the community too often neglected the need for specialist psychiatric services. The reasons for this policy are mainly ideological. There is no doubt that people with learning disabilities should have access to all mainstream services. People with learning disabilities and mental health needs, however, present complex problems for the provision of services and delivery of care.[2] For the past 15 years we have operated a specialist community mental health service for people with learning disabilities. We have, however, experienced both increasing operational problems from the diminished capacity of acute psychiatric units to admit our patients and inadequate community support provided by often untrained staff in residential and day care services who lack the skills to meet the mental health needs of our patients.

We are concerned that unless the mental health needs of people with learning disabilities are urgently addressed by local services, including the availability of inpatient admission facilities for many health districts, more of these people will continue to be admitted to and block acute psychiatric beds. This will add an extra burden to an already overstretched service.

Nick Bouras *Consultant psychiatrist*
Geraldine Holt *Consultant psychiatrist*
Section of Disability, United Medical and Dental Schools of Guy's and St Thomas's Hospitals, Guy's Hospital, London SEI 9RT

1 Shepherd G, Beadsmoore A, Moore C, Hardy P, Muijen M. Relation between bed use, social deprivation, and overall bed availability in acute adult psychiatric units, and alternative residential options: a cross sectional survey, one day census data, and staff interviews. *BMJ* 1997;314:262-6. (25 January.)
2 Bouras N, Holt G, Gravestock S. Community care for people with learning disabilities: deficits and future plans. *Psychiatric Bulletin* 1995;19:134-7.

Authors' reply

Editor—Scott Weich makes a number of methodological points, some of which have validity. On the question of response bias, we reported an analysis of the sites that supplied census data in comparison with the sites who did not on p 263. However, he is correct that we did not report similar analyses for the sites providing data on bed occupancy. We have subsequently performed these analyses, and they do not alter the conclusions.

As to the population of acute beds on which the census was based, this was 2391 from which 2236 (94%) returns were received. We considered this a high return and have no reason to suppose that the non-returns were biased. Although we did not formally check the reliability of the judgments on appropriate placements, staff were trained (p 262) and used a standardised checklist that had been specifically developed for a similar study.[1] We also emphasise that the staff's judgments on placement were validated by scores on Health of the Nation outcome scales (our table 1).

The remainder of Weich's comments seem to be based on a misreading of the paper. He criticises us for suggesting that the relocation of all patients inappropriately placed on admission wards would solve the problem of overoccupancy. We did not say this. What we said was that "a simple expansion of acute beds would not effectively address the problem." We are as concerned as he is about the underresourcing of mental health services nationally, and we do believe that some new resources are necessary. The crucial question is whether an increase in resources would be most cost effectively used to increase acute beds or to make other service improvements.

Nick Bouras and Geraldine Holt draw attention to the needs of patients with learning disabilities. They argue for more specialised services for this group, which we agree with. We would also argue for more coherent planning strategies to meet the needs of other comparatively small groups of patients with multiple and complex needs.

Alan Beadsmoore *Senior researcher*
Pollyanna Hardy *Statistician*
Research Section, Sainsbury Centre for Mental Health, London SE1 1LB

1 Fulop N, Koffman J, Hudson M. Challenging bed behaviours: the use of acute psychiatric beds in an inner London district health authority. *J Mental Health* 1992;1:335-41.

Providing cash is not the only answer for ailing mental health services

Editor—Max Marshall's editorial contains several inaccuracies that must not go unchallenged.[1] Our 400 page report[2] cannot be reduced to four simple proposals. We identified numerous problems other than deficiencies of central funding: problems in securing capital funding for new buildings in both the hospital and community sector; the health and social services divide that effectively blocks beds across the country; running down acute beds within the NHS so that there are now insufficient beds to satisfy the capital's needs; insufficient availability of care for long term patients as opposed to violently disturbed patients—the list is long. Nothing could be further from the truth than to say that we "wholeheartedly embrace" the idea that all that is needed is more cash.

We did not need the convenient excuse mentioned not to examine the actions of London's purchasers—we did examine them. London's purchasers spend a greater proportion of their budgets on mental health than do those of other cities. Even when every acute bed has been unblocked and every extracontractual referral stopped, our new calculations indicate that several inner city services still have severe gaps between their actual and predicted costs for mental health services, especially in deprived areas.

There is no special pleading for money for London in our report: in fact other deprived inner cities stand to gain more than London from the reallocation of resources within the NHS, and the problems we report are mirrored in other cities. Neither are we, as suggested, pleading for someone else's money. The money is public money, and it needs to be spent for most public good.

There are two questions about the level of resource, and they should be kept separate. Firstly, at the existing levels of expenditure on the NHS are deprived inner cities receiving the right proportion of the total spent (we argue that they are not). Secondly, are we as a country spending enough on the NHS?

It is absurd to describe what we have written as "a robust defence of the status quo." We are only reporting on a situation which any serious commentator would consider needs definite action—and we are scathingly critical of much of what we do describe. As for the London commission making recommendations based on these findings—until they do readers of the *BMJ* would be well advised to read what we have written in the original.

David Goldberg *London commissioner*
Graham Thornicroft *Project coordinator*
Institute of Psychiatry, de Crespigny Park, London SE5 8AF

1 Marshall M. London's mental health services in crisis. *BMJ* 1997;314:246. (25 January.)
2 King's Fund. *London's mental health*, London: King's Fund, 1997.

Do we need more psychiatric beds?

Editor—The publication of the London commission report[1] points to a demand for acute psychiatric beds in London hospitals that either goes unmet or is met often out of the area by private extracontractual referrals. Despite high occupancy rates many services unnecessarily retain patients in acute psychiatric beds because of a lack of alternative provision.[2] Increasing the number of acute beds in London could result in a reduction in occupancy; patients remaining in hospital for longer; an increase of appropriate admissions; or an increase in the admission of people who are less seriously ill.

In the service which covers Tower Hamlets' population of 160 000 the number of acute beds increased by 25% between 1993 and October 1994 (from 77 to 96). This followed a phase of closures leading to excessive occupancy rates and the inability to admit some seriously ill patients. In 1992 there were 329 admissions to the acute psychiatric service and this rose by 109% to 686 in 1995. Bed availability was also effectively increased by an increase in supported hostel accommodation, with a resulting reduction in the number of patients occupying a bed throughout the year from 17 to 11. The mean length of new admissions fell from 80 to 47 days.

We examined the case note diagnosis and history of previous admissions in a random sample of about 100 patients admitted in each period. The percentage of patients having their first admission to a psychiatric hospital fell slightly from 32% to 25%, as did the proportion with schizophrenia or a schizophrenia-like illness (from 51% to

45%). The proportion of bed days occupied by patients with schizophrenia or a schizophrenia-like illness increased from 67% to 76% and detentions under sections 2 and 3 of the Mental Health Act rose by 68%.

Better community services and the earlier discharge of patients no longer needing to remain in hospital may be the most desirable long term solution to the presently unmet need for acute psychiatric beds. However, our experience suggests that increasing the numbers of acute psychiatric beds in a hardpressed inner London service reduces occupancy rates and allows an increase in the admissions of patients with serious mental illness. In hardpressed services this is not a regressive step to asylum psychiatry but allows hospital services to be integrated with community services.

Richard Duffett *Honorary clinical research fellow*
John Cookson *Consultant psychiatrist*
Tower Hamlets Healthcare NHS Trust, The Royal London Hospital, London E3 4LL

1 King's Fund. *London's mental health.* London: King's Fund, 1997.
2 Shepherd G, Beadsmoore A, Moore C, Hardy P, Muijen M. Relation between bed use, social deprivation, and overall bed availability in acute adult psychiatric units, and alternative residential options: a cross sectional survey, one day census, and staff interviews. *BMJ* 1997;314:262-6. (25 January.)

Stop gap remedies

Editor—The authors of the King's Fund report *London's Mental Health*[1] give authoritative expression to pressures we in Westminster experience day by day. They suggest some of the reasons for these pressures, but they do not question why they seem to persist, and indeed to intensify, despite high and increased expenditure on mental health. This question is crucial because remedies for the present crisis depend on how it is answered.[2]

We suggest that two sets of answers ought to be considered—one relating to the functioning of the mental health system and the other to wider societal factors. According to the question concerning the functioning of the mental health system, the rate of underlying psychiatric morbidity or mental vulnerability in London is not rising. Instead, the crisis is due to the doors between hospitals and the community revolving faster and faster—the result of buck passing and back protecting behaviour—and to the mental health services becoming more efficient at turning vulnerable people into patients. In our view, such explanations are for the most part implausible because they imply that the pressure on hospitals comes from a higher admission rate of less vulnerable people. However, such evidence as the proportion of compulsory admissions shows that the more vulnerable people are being admitted in increasing numbers.

Alternatively, social and economic change could be creating a rising tide of morbidity and reducing the capacity of society to care for and contain those who are mentally vulnerable outside the mental health system. For example one source of change is the family. Unstable families have detrimental consequences for mental health in adult life and fragmented families for their capacity to care for mentally vulnerable members. Other changes are the increase in homelessness, unemployment, and insecurity at work. These are major sources of mental stress, and the reduced availability of unskilled jobs and low cost housing has removed niches where mentally vulnerable people previously found shelter.

It may be difficult to disentangle the consequences of these and other trends, as also to establish a differential effect on London. Nevertheless some of these consequences will be long term, potentially with us for generations, and they will require more than stop gap remedies. Should the King's Fund not raise its sights, take a long view, and do some sober thinking for the next millennium?

Lena Lessof *Chair*
Stephen Hatch *Director*
Westminster Association for Health, London W9 3QF

1 King's Fund. *London's mental health.* London: King's Fund, 1997.
2 Marshall M. London's mental health services in crisis. *BMJ* 1997;314:246.(25 January.)

Bodybuilders find it easy to obtain insulin to help them in training

Editor—We have recently been involved in the care of a 21 year old amateur bodybuilder, who was admitted after taking an excessive amount of insulin intravenously. He developed severe brain damage after prolonged neuroglycopenia. His case brought several points to our attention. Since anabolic steroids have been designated illegal in competitive sport, athletes have been looking for alternative drugs to help them put on muscle mass and burn off fat. With little understanding of the potentially serious side effects, they are now using preparations that have no proved benefit in sports training.

After reading several bodybuilding magazines and scanning numerous internet web sites we have realised that the extent of misuse is considerable and growing. Some of the drugs advocated are testosterone, insulin, insulin-like growth factor 1, thyroxine, erythropoietin, clenbuterol (a β_2 agonist and veterinary drug used to promote muscle growth in exhibition livestock), and mifepristone (which is said to be anticatabolic).

Although there is some evidence in favour of testosterone increasing fat free mass and muscle storage when combined with strength training,[1] there is no evidence that other drugs do the same.[2] It is worrying that a drug such as insulin is being described as "the most powerful anabolic hormone on the planet"[3] to a readership that can be obsessive and often has a poor body image.[4] We could find no evidence in the literature to support the use of insulin in this context.

It became apparent to us how easy it is to obtain insulin from pharmacies, and that this fact is better known to bodybuilders than to doctors. Insulin is a P drug, which means that it can be obtained without a prescription at the pharmacist's discretion. We were able to buy soluble insulin over the counter without any prescription or identification. We are not diabetic. This case has identified two problems. Firstly, the availability of uncensored information on the internet is growing, encouraging the use of drugs such as insulin. Secondly, it is easy to obtain insulin once you know how. Perhaps the Department of Health should review its policy on the sale of insulin.

S L Elkin *Registrar*
S Brady *House officer*
I P Williams *Consultant physician*
Hemel Hempstead Hospital, Hemel Hempstead HP2 4AD

1 Bhasin S, Storer TW, Berman N, Callegari C, Clevenger B, Phillips J, *et al.* The effects of supraphysiological doses of testosterone on muscle size and strength in normal men. *N Engl J Med* 1996;335:1-7.
2 Wagner JC. Enhancement of athletic performance with drugs. An overview. *Sports Med* 1991;12:250-65.
3 Kneller B. Exogenous insulin. *Musclemag Int* 1996;171:24-34.
4 Blouin AG, Goldfield GS. Body image and steroid use in male bodybuilders. *Int J Eat Disord* 1995;18:159-65.

Dangers of sunbeds are greater in the commercial sector

Editor—We have studied the ultraviolet light output of ultraviolet A sunbeds available for hire in Bradford and found a striking variability in the output of both ultraviolet A and ultraviolet B.[1] Results from the analysis of the 50 sunbeds studied showed a threefold variation in ultraviolet A output with a mean output of 13.5 mW/cm^2 and a 60-fold variation with a mean of 19.2 μW/cm^2 for ultraviolet B. The greater variability for ultraviolet B was principally caused by differences in types of fluorescent tubes used in the sunbeds. Outputs of facial units in sunbeds ranged from 18 to 45 mW/cm^2 (ultraviolet A).

In the light of the letter by Norris[2] and the subsequent move by the Health Education Authority to call for the phasing out of sunbeds in local authority and council premises[3] we reanalysed our data comparing local authority operated sunbeds with sunbeds operated by private hire companies or on commercial premises.

Outputs of ultraviolet A and B from a total of 17 private hire and commercial sunbeds and 33 local authority based sunbeds were compared. There was a significant difference for both ultraviolet A and ultraviolet B, the output being higher in the commercial beds for ultraviolet B ($P < 0.0005$) and ultraviolet A ($P < 0.01$). The higher mean ultraviolet B readings in the private sector premises were principally accounted for by the fact that in our survey tubes emitting high ultraviolet B were used only in the private sector.

There can be no doubt that sunbeds are widely used and that they carry a risk of inducing skin cancer.[4] Clearly the higher the ultraviolet light output the greater the risk. We think that without further education of the public in the potential danger of sunbeds their removal from local authority or council run premises will only drive those who wish to use them into the commercial sector, where the dangers may be greater. Rather than banning sunbeds from council premises a more sensible approach would be to provide greater education about sunbeds and set up national guidelines on the operation of sunbeds and their recommended power outputs.

Andrew Wright *Consultant dermatologist*
Graham Hart *Medical physicist*
Liz Kernohan *Consultant in public health medicine*

1 Wright AL, Hart GC, Kernohan EE, Twentyman G. A survey of the UV output from UVA sunbeds in Bradford. *Photodermatol Photoimmunol Photomed* (in press).
2 Norris JFB. Sunscreens, suntans, and skin cancer. *BMJ* 1996;313:941-2.
3 Health Education Authority. *Calls to phase out sunbeds from council premises.* London: HEA, 1996. (Press release can/96/005.)
4 Bulman A. People are overusing sunbeds. *BMJ* 1995;310:1327.

Junior surgeons are becoming deskilled as result of Calman proposals

Editor—With internal cover, I and three colleagues maintain a 1 in 4 surgical rota. Consultants with school aged children take holidays at Christmas, at Easter, and in August. The more senior consultants and those without children bear the brunt of increased on call work during these periods.

During March this year I was the duty consultant for 13 nights out of 31. This included a 72 hour midweek shift, a 72 hour weekend shift, and three 48 hour shifts. Hence I was working or on call, or both, for a total of 412 hours. This is double the maximum permitted hours for our junior staff. Furthermore, the resulting hourly remuneration rate is ludicrous.

With the inception of the Calman system, colleagues and I have to come to the hospital much more often than previously to operate at nights and weekends, because our juniors do not have the experience to cope with surgical emergencies such as small bowel obstruction, which five or 10 years ago could safely have been left to a post-fellowship registrar. With an increased on call commitment it is inevitable that we will operate on the emergency ourselves in the middle of the night rather than assist an inexperienced registrar. We are rarely on call with our own trainees, and in the present legal climate one cannot risk letting registrars operate when one doesn't have personal experience of their ability.

In Dartford this winter we had up to 100 medical and geriatric outliers. The shortage of surgical beds and the overflow of medical cases into our wards meant that our registrars had little experience of routine elective surgery.

The chief medical officer, Sir Kenneth Calman, and I both warned the previous secretary of state for health, Mrs Bottomley, in stark terms of the consequences of extrapolating the reduction in inpatient stay resulting from more day care surgery to the sorry situation in which we now find ourselves. The new hospital currently being planned for Dartford under the private finance initiative is being designed with a quarter fewer beds than our existing facilities.

The demographic situation that Britain faces over the next few years, with a bulge in the number of frail patients over the age of 80 requiring acute medical and surgical services, will mean that more beds have to be available if we are to provide a health service rather than a sick service and adequately train the next generation of young consultants.

F David Skidmore *Consultant surgeon*
Joyce Green Hospital, Dartford, Kent DA1 5PL

New government must reassess its criminal justice policy

Editor—Those who provide medical and psychiatric care to offenders see their work influenced not just by the health policies of the main political parties but by the parties' criminal justice policies. The cornerstone of the Conservatives' policy on law and order since 1993 has been the non-apologetic endorsement of imprisonment, based on the assertion that "prison works." Since 1992 the prison population in England and Wales has increased by half to its current level of almost 60 000. This trend is likely to continue: proposals from the government for longer mandatory sentences for certain repeat offenders would increase the prison population by an estimated 11 000. Similar rhetoric is seen in Labour's "proposals for tough action on crime," with increases in custodial sentences for crimes of violence and harsher measures for juvenile offenders.[1] Both parties seem committed to using imprisonment despite an inevitable worsening of the problems in prisons.

Prisons are damaging and violent places, with large numbers of inmates who are mentally ill, have personality disorders, or are inadequate.[2] Paulus showed a direct relation between "social crowding" and the death rate from all causes in prisons, with an almost exponential increase in suicides, disciplinary infractions, and referrals for psychiatric assessment.[3] During 1985-95, for example, 482 prisoners committed suicide in British prisons; and in the first four months of 1996, 17 prisoners committed suicide.[4]

The triad of popular ignorance, demands for the control of crime, and the presence of violent crime go well together in prompting harsher sentences. Yet with a general election pending and each party not wishing to be seen as "soft" on crime, the result is a parallel approach to developments in policy that bears little relation to research about the causes of crime. The Conservatives' and Labour's claims that they will increase spending on the prevention of crime are hard to believe if only on monetary grounds. It is hard to see where the funds for such preventive measures will come from if the rising prison population continues to soak up resources. The role of the prison service will probably be simply to contain an ever increasing number of inmates, at the expense of their quality of life. The result will be inevitably greater pressures on secure psychiatric units and the special hospitals which will be required to deal with even more referrals from the prison service.

The new government must consider the long term effects of its policies and raise this area from party rivalries by setting up a royal commission to provide an overview of the treatment of offenders.[5]

Tom McClintock *Lecturer in forensic psychiatry*
Crozier Terrace Medium Secure Unit, Hackney Hospital, London E9 6BE

1 Labour Party. *Safer communities, safer Britain. Labour's proposals for tough action on crime.* London: Labour Party, 1995.
2 Gunn J, Maden A, Swinton M. Treatment needs of patients with psychiatric disorders. *BMJ* 1991;303:338-41.
3 Paulus P. *Prison crowding: a psychological perspective.* New York: Springer-Verlag, 1988.
4 National Association for Probation Officers. Prison suicides in England and Wales. *Criminal Justice Digest* 1996;89:17.
5 Blom-Cooper L, McConville S. *A case for a royal commission on crime and punishment.* London: Prison Reform Trust, 1997.

Prophylaxis of venous thromboembolism

Article did not give enough information

Editor—Systematic review is the best way of summarising the results of randomised trials. It is therefore disappointing that the Fortnightly Review on the prophylaxis of venous thromboembolism is so unsystematic.[1] M Verstraete cites as sources of evidence, firstly, a set of guidelines whose method of preparation is not specified and, secondly, at least two review articles that were derived by consensus rather than by systematic appraisal of the literature. This prevents readers gauging the strength of evidence supporting his recommendations. Nor does he tell us whether he tried to find other reviews, how he selected reviews for inclusion, what he omitted from the reviews cited, how he reconciled differences between them, or whether he checked important sources of evidence such as the Cochrane Library and the Agency for Health Care Policy and Research. Three published relevant systematic reviews are not cited.[2-4]

Were trials appraised before inclusion? This concern is underlined by the unequivocal affirmation of the effectiveness of low molecular weight heparins in spinal cord injury being based on an unrandomised trial. How did Verstraete use Cook *et al*'s grading system for evidence? That approach requires a trial's effect size to exceed the minimal clinically important benefit to

attain grade A, and Verstraete does not specify that level.

Perhaps because of the lack of use of meta-analyses, the review provides little quantitative information on the absolute or relative effectiveness of different methods of thromboprophylaxis. Low molecular weight heparins may be more effective than adjusted dose unfractionated heparin and other approaches, but is the difference large enough to be clinically important? Are there differences in the risks and side effects (especially rates of bleeding, a major source of surgical caution about thromboprophylaxis)? What about costs?

A recent issue of *Effective Health Care*, attempting to review the literature on thromboprophylaxis in total hip replacement more systematically than Verstraete does, concluded that "many of the studies and reviews in this area are of doubtful quality or relevance to contemporary practice. On the basis of existing knowledge it is not possible to produce valid evidence-based recommendations on this issue."[5] The authors' more systematic approach may explain why their conclusions differ so markedly from Verstraete's.

Review articles have an important role in maintaining and enhancing doctors' knowledge; all the more important then that they give readers enough information to allow assessment of the origin, quality, strength, and relevance of the evidence that they summarise. This article was not successful in that regard.

Thomas H S Dent *Consultant in public health medicine*
Monica A Dent *Senior registrar in public health medicine*
West Surrey Health Authority, Camberley GU16 5QE

1 Verstraete M. Prophylaxis of venous thromboembolism. *BMJ* 1997;314:123-5. (11 January.)
2 Collins R, Scrimgeour A, Yusuf S, Peto R. Reduction in fatal pulmonary embolism and venous thrombosis by perioperative administration of subcutaneous heparin: overview of results of randomized trials in general, orthopedic and urologic surgery. *N Engl J Med* 1988;318:1162-73.
3 Nurmohamed MT, Rosendaal FR, Büller HR, Dekker E, Hommes DW, Vandenbroucke JP, *et al.* Low molecular weight heparin versus standard heparin in general and orthopaedic surgery: a meta-analysis. *Lancet* 1992;340:152-6.
4 Leizorovicz A, Haugh MC, Chapuis F-R, Samama MM, Boissel J-P. Low molecular weight heparin in the prevention of perioperative thrombosis. *BMJ* 1992;305:913-20.
5 NHS Centre for Reviews and Dissemination and Nuffield Institute for Health. Total hip replacement. *Effective Health Care* 1996;2:1-12.

Regional anaesthesia reduces thromboembolic morbidity

Editor—M Verstraete does not mention the role of the anaesthetic technique in the prevention of thromboembolic disease.[1] Epidural analgesia can significantly reduce the incidence of deep vein thrombosis and pulmonary embolism after emergency hip surgery, elective hip replacement, and other forms of surgery. Meta-analysis has confirmed the reduction in the formation of deep vein thrombosis when regional anaesthesia is used instead of general anaesthesia.[2]

How thromboembolism is reduced is unclear, but several physiological changes occur that influence Virchow's triad. Regional anaesthesia attenuates the stress response and so reduces the increase in coagulability observed postoperatively. It maintains fibrinolysis and reduces platelet adhesiveness. It also increases arterial and venous blood flow in the lower limbs. Finally, mobilisation after major surgery can occur remarkably early after regional analgesia, which may reduce the period at risk.

Regional anaesthesia with local anaesthetics produces these effects. Whether regional analgesia with opioids produces the same benefit is unclear. Also unclear is whether regional anaesthesia (peroperatively) alone prevents postoperative formation of thrombus or whether blockade of longer duration is necessary (postoperative regional analgesia).

The recent national confidential inquiry into perioperative deaths found that a fifth of the orthopaedic patients who died and underwent postmortem examination died of pulmonary embolus.[3] The report commented on the lack of thromboembolic prophylaxis but did not draw strong conclusions.

Verstraete includes major gynaecological surgery in patients aged over 40 with at least one risk factor (one of which is pregnancy) in a medium risk group requiring prophylaxis. The working party of the Royal College of Obstetricians and Gynaecologists includes age over 35 and emergency caesarean section in labour as risk factors requiring prophylaxis with heparin.[4] Fatal pulmonary embolus was the commonest cause of direct maternal death in 1991-3,[5] and 13 of the 17 deaths occurred after caesarean section. We recently completed a survey of anaesthetists in 243 hospitals in Britain, in which we examined the practice of thromboembolic prophylaxis in obstetric surgery. We received 176 (72%) complete replies (table 1).

Table 1 Responses of anaesthetists to questions about routine use of thromboembolic prophylaxis in obstetric surgery (176 complete replies were received)

Operation	Use of mechanical devices	Use of anti-coagulants
Elective caesarean section	46	25
Emergency caesarean section	46	25
Abdominal hysterectomy	60	89

Both the national confidential inquiry into perioperative deaths and our survey identify a lack of use of thromboembolic prophylaxis. Regional anaesthesia for operations on the lower limbs and pelvis seems likely to reduce thromboembolic morbidity when other methods are not used. Whether regional anaesthesia and analgesia have a role when mechanical or anticoagulant prophylaxis is used is uncertain. While levels of prophylaxis are low, however, the use of regional techniques has much to commend it.

T M Cook *Specialist registrar in anaesthesia*
Bristol Royal Infirmary, Bristol BS2 8W

R J H Baylis *Specialist registrar in anaesthesia*
Salisbury District Hospital, Salisbury SP2 8BJ

R Marjot *Consultant in anaesthesia*
Royal United Hospital, Bath BA1 3NG

1 Verstraete M. Prophylaxis of venous thromboembolism. *BMJ* 1997;314:123-5. (11 January.)
2 Sorensen RM, Pace NL. Mortality and morbidity of regional versus general anaesthesia: a meta-analysis. *Anesthesiology* 1991;75:A1053.
3 National Confidential Enquiry into Perioperative Deaths. *Report of the national confidential enquiry into perioperative deaths 1993/4.* London: NCEPOD, 1996.
4 Royal College of Obstetricians and Gynaecologists. *Report of the working party on prophylaxis against thomboembolism in gynaecology and obstetrics.* London: RCOG, 1995.
5 *Report on the confidential enquiry into maternal deaths in the United Kingdom 1991-1993.* London: HMSO, 1996.

Author's reply

Editor—Thomas H S Dent and Monica A Dent criticise the fact that my review was based largely on European and American guidelines and consensus reports, including the recent one by the Scottish Intercollegiate Guidelines Network (my reference 4). The brief that I received from the *BMJ* was to put the latter into perspective. I indicated in my review that I used the definition of evidence and the grading described by Cook *et al* (my reference 9) and mentioned for each class of thrombotic risk the grade of evidence, which, as I also mentioned, accords with the grades recently published by Clagett *et al* (my reference 2).

I concede that, because of limitations on space, I could not mention all reviews (systematic or not), meta-analyses, and opinions that have been published on the subject. The most provocative, controversial, and anti-educational conclusion quoted by Dent and Dent and published in *Effective Health Care*—that "there is no valid evidence-based recommendation on the use of thromboprophylaxis in total hip replacement"—is quite opposite to the evidence based recommendation of reputed critical experts.[1] On the basis of level I data, their grade A recommendation for routine use in hip replacement surgery is postoperative prophylaxis with twice daily, fixed dose, unmonitored subcutaneous low molecular weight heparin; low intensity (international normalised ratio 2.0-3.0) oral anticoagulants (started preoperatively or immediately after operation); or adjusted dose unfractionated heparin (started preoperatively). These are the most effective anticoagulant based prophylactic regimens for this indication. In total knee replacement surgery the same group of experts recommends postoperative subcutaneous unmonitored low molecular weight heparin (twice daily at a fixed dose) as the most effective anticoagulant based prophylactic regimen (grade A recommendation on level I data).[1]

I agree with T M Cook and colleagues that not mentioning the impact of the anaesthetic technique on the incidence of deep venous thrombosis and pulmonary embolism is a shortcoming in my review.

Their letter compensates for my omission but also indicates that many uncertainties still obscure this issue. The same authors rightly indicate that emergency caesarean section in patients aged over 35 belongs to the category of medium thrombotic risk, which erroneously was not mentioned in box 2 of my review.

M Verstraete *Professor*
Centre for Molecular and Vascular Biology, University of Leuven, Campus Gasthuisberg, B-3000 Leuven, Belgium

1 Claget GP, Anderson FA Jr, Heit J, Levine MN, Wheeler HB. Prevention of venous thromboembolism. *Chest* 1995;108:312-34S.

Not all those who died after Hillsborough did so by 3 15 pm

Editor—In his recent letter David Slater misses the point that my review of the Hillsborough drama was just that—a review of a television programme.[1 2] The scene in which he was portrayed speaking to an off duty Liverpool policeman was included in the drama, and this is the reason I referred to it in my article. The veracity of the scene is obviously not something on which I am qualified to comment. Slater says that he approached the witness concerned at the suggestion of the coroner and that he had no clandestine motives. I have no reason to doubt this. I am also pleased to have been educated, in that I have learnt that it is accepted practice for coroners to ask pathologists (whose duties are, as Slater tells us, "to present the pathological facts and findings and offer unbiased opinions that will assist the coroner and jury") to telephone other witnesses and arrange meetings with them. Until now I had thought that the coroner decided that all those who died had received their fatal injuries by 3 15 pm. Slater states that the coroner's decision was that they were all dead by that time. This would be difficult to refute effectively by anyone who wanted to do so, by virtue of the fact that the victims to whom this applies are indeed dead. Those who survived presumably received different injuries, at different times. It is also a matter of public record that some victims who died in hospital did not die until well after 3 15 pm[3]—in the extreme case of Tony Bland, death did not occur for several years after that time. I personally, along with many other members of medical staff, was attempting resuscitation on those who subsequently died, but were very much alive, well after 3 15 pm. This is quite simply a matter of fact.

Ed Walker *Staff grade doctor in accident and emergency*
47 Limelands Road, Sheffield S31 7XU

1 Slater D. Hillsborough television drama. *BMJ* 1997;314:901-2. (22 March.)
2 Walker E. A day Sheffield will never forget. *BMJ* 1996;313:1491. (7 December.)
3 Wardrope J, Ryan F, Clark G, Venables G, Crosby AD, Redgrave P. The Hillsborough tragedy. *BMJ* 1991; 303:1381.

Concussive convulsions

Editorial perpetuated myths about convulsive syncope

Editor—Paul McCrory and colleagues' description of concussive convulsions as a new variety of non-epileptic seizure with good prognosis is a major contribution to the differential diagnostic field of fits, faints, and funny turns.[1] It is a pity that the accompanying editorial does not do justice to this difficult subject.[2]

As McCrory and colleagues point out, the concussive convulsions that they observed could not have been either traditional anoxic seizures (common convulsive syncope) or anoxic-epileptic seizures because the latency between trauma and convulsion was too short for even cardiac asystole to be the mechanism.[3 4] In their editorial J W A S Sander and M F O'Donoghue "suggest that they represent an acute symptomatic but benign seizure,"[2] but the key question is whether these seizures are epileptic or non-epileptic.[3 4] Figure 1 in McCrory and colleagues' paper shows that the footballer's eyes were closed during his convulsion, a feature not compatible with a generalised tonic-clonic epileptic seizure.[5]

Sander and O'Donoghue's editorial also does not do justice to the dramatic phenomenology of common convulsive syncope.[3-5] It perpetuates myths such as that urinary incontinence occurs often in tonic-clonic epileptic seizures but is rare in syncope. I urge readers to read a recent concise and accessible review on how to diagnose syncope[5]: innumerable patients would benefit if this article was widely read.

John Stephenson *Professor*
Fraser of Allander Unit (Neurology and Child Development), Royal Hospital for Sick Children, Glasgow G3 8SJ

1 McCrory PR, Bladin PF, Berkovic SF. Retrospective study of concussive convulsions in elite Australian rules and rugby league footballers: phenomenology, aetiology, and outcome. *BMJ* 1997;314:171-4. (18 January.)
2 Sander-JWAS, O'Donoghue MF. Epilepsy: getting the diagnosis right. *BMJ* 1997;314:158-9. (18 January.)
3 Stephenson JBP. *Fits and faints.* London: MacKeith Press, 1990:41-124.
4 Stephenson JBP. Nonepileptic seizures, anoxic-epileptic seizures and epileptic-anoxic seizures. In: Wallace SJ, ed. *Epilepsy in children.* London: Chapman and Hall, 1996:5-26.
5 Lempert T. Recognising syncope: pitfalls and surprises. *J R Soc Med* 1996;89:372-5.

Wrong diagnosis may deprive people of their livelihood

Editor—Paul R McCrory and colleagues' paper on concussive convulsions is important in re-emphasising the benign nature of these episodes and the fact that they might be confused with epileptic phenomena.[1] This interpretation of these events may be particularly unfortunate for sportsmen and sportswomen, who may be assessed after the events by non-specialists. The following case also shows that while none of McCrory and colleagues' series had recurrent concussive convulsions, such episodes can occur.

In 1990, at the age of 23, Alan Munro, a jockey without any medical history, was thrown from his horse and kicked on the head by a horse behind him. Video footage showed that his legs shot up in the air and he had a convulsion for about 10 seconds. He had post-traumatic amnesia, which extended to the point at which he was placed in the ambulance on the race track. He was stopped from riding for three months but returned to his career to ride 10 group 1 winners between 1990 and 1993, including the winner of the English Derby (fig 1). In March 1996, in Hong Kong, an ill tempered horse threw its head back at him, striking him on the head. He fell from the horse and again had a brief convulsive episode. Again, he had post-traumatic amnesia extending to the time when he was in an ambulance on the way to hospital. He was fully investigated with electroencephalography and magnetic resonance imaging, which showed no appreciable abnormality. On this occasion the Hong Kong authorities banned him from riding for 12 months.

Fig 1 Alan Munro after winning a race in Japan in 1995

There seems no reason to doubt that both these episodes were concussive convulsions and that he was inappropriately deprived of his livelihood for 12 months. I hope that McCrory and colleagues' paper will receive wide enough attention to prevent this fate befalling other young sportsmen and sportswomen.

David Chadwick *Professor of neurology*
Neurological Science, Walton Centre for Neurology and Neurosurgery, Liverpool L9 1AE

1 McCrory PR, Bladin PF, Berkovic SF. Retrospective study of concussive convulsions in elite Australian rules and rugby league footballers: phenomenology, aetiology, and outcome. *BMJ* 1997;314:171-4. (18 January.)