length of stay was 30 (30·5) days after entry to the study, and 2367 bed days (8% of the beds in the medical directorate) were used. For those treated, the mean input per patient per weekday spent in hospital was 19·1 (9·9) minutes from physiotherapy, 15·3 (12·2) minutes from occupational therapy, 13·2 (7·9) minutes from speech therapy, and 4·7 (6) minutes from a dietitian.

We estimated that 10-12 beds were required for stroke care in our 500 bed district general hospital, which serves a population of 138 000. Previous research suggests that stroke rehabilitation is most effectively provided by flexible use of beds in a rehabilitation ward rather than a demarcated unit.[2] As a result of our study we have set up a stroke rehabilitation service, for patients of all ages, in an existing rehabilitation ward of a geriatric unit, and physiotherapy for patients with stroke has been increased. This has been achieved by reorganisation with no specific cost implications. We expect this reorganisation to improve medical management. In addition, we hope to improve outcome, as Kalra *et al* recently showed that a given amount of paramedical treatment is more effective in a stroke unit than a general medical ward[3]—perhaps because of the contribution made by functionally oriented nursing care.[4] This kind of reorganisation, with no or minimal cost, to provide a stroke service might also be possible for other hospitals.

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Acute respiratory distress syndrome

EDITOR,—In their review of the acute respiratory distress syndrome Richard Beale and colleagues maintain that a pulmonary artery occlusion pressure of less than 18 mm Hg is required to allow differentiation between the syndrome and pulmonary oedema secondary to acute heart failure and fluid overload.[1] I would caution against using a specific pulmonary artery occlusion pressure to distinguish pulmonary oedema of cardiac origin from that due to increased permeability. At issue are not only the various technical factors involved in obtaining appropriate data with a pulmonary artery catheter but also the numerous physiological reasons that may render the pulmonary artery occlusion pressure an unreliable index of left atrial, and hence left ventricular, end diastolic pressure.[2]

Murray *et al* have proposed an expanded definition of the acute respiratory distress syndrome that excludes the pulmonary artery occlusion pressure as a diagnostic criterion.[3] Their lung injury score incorporates the chest radiographic pattern, the severity of hypoxaemia as measured by the arterial oxygen tension and fractional concentration of inspired oxygen, the requirement for positive end expiratory pressure (for mechanically ventilated patients), and compliance of the respiratory system (when available). Murray *et al* provide a further argument against use of the pulmonary artery occlusion pressure to diagnose the acute respiratory distress syndrome. Because a pulmonary artery catheter is often inserted several hours after presentation the data obtained may not reflect the patient's initial haemodynamic profile. For example, a patient with pulmonary oedema due to transient left ventricular systolic dysfunction may have a normal pulmonary artery occlusion pressure after anti-ischaemic treatment has been started. Conversely, patients with the acute respiratory distress syndrome often undergo aggressive fluid resuscitation, resulting in a high pulmonary artery occlusion pressure at the initial measurement.

The use of a specific pulmonary artery occlusion pressure to differentiate between pulmonary oedema of cardiac origin and that due to increased permeability may lead to an incorrect diagnosis and therefore to inappropriate management of critically ill patients.

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2 Raper R, Sibbald WJ. Misled by the wedge? The Swan-Ganz catheter and left ventricular preload. *Chest* 1986;89:427-34.
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Antibiotics and fatigue

EDITOR,—It is bad enough when an unjustified conclusion slips past the gatekeepers, but when it is perpetrated by the editor himself[1] one must protest. Jean-Francois Bergmann and his seven colleagues[2] have NOT shown that antibiotics do not cause fatigue, having only investigated amoxycillin versus placebo.[2] They have not even succeeded in the hitherto impossible task of proving a negative, merely having failed to show that amoxycillin did "cause" fatigue in their sample of 79 healthy volunteers.

I concede, without waiting for the challenge, that I have no hypothesis as to why other antibiotics should differ from amoxycillin—but then, as there was no original hypothesis as to why amoxycillin was a prototypical antibiotic, I don't need one.

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Purchasing decisions in the NHS

Made by managers ignorant of health care

EDITOR,—I suggest that the reason why decisions on purchasing in the NHS are still not explicit three years after the introduction of the NHS reforms[1] is that all too often those making the decisions are not appropriately qualified. On Thursday 18 November an advertisement appeared in the appointments section of the *Times* for a general manager for the Greater Glasgow Health Board.[2] The advertisement pointed out that the board is one of the largest purchasers of health care in Britain with an annual expenditure in excess of £750 000 000. A brief description of the board and the position was followed by a stipulation of the qualifications required. Applicants were expected to be: "Already operating at head of a large organisation"; of "proven success in general management, finance and strategic planning; innovative with presence, flair and ability to communicate effectively at all levels, lead and manage change and develop people." The last sentence under the heading qualifications read: "Experience of the NHS is not essential."

One week later the *Times* featured an advertisement for a general manager of manufacturing in a "high paced, high volume, high quality food manufacturing business" in the north of England.[3] This advertisement also valued a "leadership style that generates continuous performance enhancement," but, in contrast to Glasgow Health Board, this company regarded experience at managerial level in a sizable food busines as essential.

It has yet to be proved that commercial style management is of any benefit to the delivery of health care in the NHS, but if we must mimic our industrial counterparts we should at least do it accurately. Surely no commercial institution would entrust a £750 000 000 budget to a manager, however charismatic, who did not have experience of the field of operation.

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1 Appleby J. NHS purchasing decisions are still not explicit. *BMJ* 1993;307:1376. (27 November.)
2 *Times* (appointments section) 1993 Nov 18:1.
3 *Times* (appointments section) 1993 Nov 25:1.

Target high spending areas for rationing

EDITOR,—It is difficult to understand at a superficial level how, if all hospitals provided orthopaedic services at the national average cost, the NHS could achieve savings of over £87m.[1] Assuming that the calculations by the Chartered Institute of Public Finance and Accountancy are correct, however, this represents quite a small saving if compared, for example, with recent expenditure on computer systems for the NHS.[2] On a more serious note, John Appleby mentions various forms of plastic surgery and infertility treatment as targets for explicit rationing.[1] If rationing or priority setting is about containing total spending on the NHS I find it surprising that the debate is concentrated on a few peripheral procedures; even if they were banned only minute overall savings would result.

It has been estimated that in the United States about half of the budget for Medicare (for the over 65s) is spent on the last few months of life.[3] Any sensible debate on priority setting should address the political imperative of cost and tackle the high expenditure area of health care.

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3 Kitzhaber JA. Prioritising health services in an era of limits. *BMJ* 1993;307:373-7.

Correction

War in Bosnia

An editorial error occurred in this letter by Marijana Peruzović and Lucija Čikeš (2 October, p 872). The title should read "War in former Yugoslavia" (the letter does not relate to the war in Bosnia).

Natural family planning

An error occurred in the letter on natural family planning by John Kelly (20 November, p 1357). The last sentence of the penultimate paragraph should have read "The same issue quoted a recent analysis... which found a relative risk of 0·4 for people using condoms—that is, 40% [not 10%, as published] of the risk for people not using condoms."