infarction in 1988. For the 109 patients whose notes were available (less than half the number of patients identified from the coronary care unit's records), the median delay in attending the accident and emergency department was 240 minutes. The median delay in hospital was 84 minutes.

Homerton Hospital serves a deprived inner city population, whose access to hospital facilities is likely to be poor and awareness of medical need low. Patient delay has been identified as the most important factor in the overall delay to receipt of coronary care.[2,3] In these and other studies the delay between the onset of symptoms and arrival at hospital ranges from 91 to 135 minutes. The prolonged delay in our patients suggests that in this setting at least "fast track" admission, or direct admission to the coronary care unit, would have little impact on overall delay.

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Acute medical beds could be cut

SIR,—The Audit Commission's report on the use of medical beds in acute hospitals points to variations in average length of stay of between four and 15 days for similar patients and recommends regular examination of the average length of stay for similar conditions.[1,2] Given the present market oriented approach to resource allocation, the report raises the spectre of a finance driven "capping" of patient costs. How are doctors to face this challenge?

Both managers and doctors in the health service want efficiency. A clinically led approach to the challenge of the Audit Commission, acknowledging the need for effective spending, provides the route towards better care of patients.

One approach to reduce unnecessary stay in hospital is to attempt to shift the entire distribution curve for inpatient stays to the left. Mozes *et al* attempted this by discharging patients who did not fit strict preset criteria for continuing inpatient care unless the consultant in charge gave written instructions to the contrary.[3] This achieved a 52·6% reduction in "unjustified" days on a medical ward, reducing the average length of stay from 6·3 to 4·6 days. At one month there was no difference in subjective ratings of health or readmission or death rates. A standardised approach could, however, affect clinical freedom and bring financial pressure to end the stay of non-standard patients.

A different approach is to concentrate on the few excessively expensive patients who place major demands on acute medical beds. Our own interest is somatisation, an abnormal illness behaviour in which the patient repeatedly presents to doctors with multiple and unexplained physical complaints. The recent debate on the financial aspects of reform of the NHS has dwelt on the costs of the "average" patient and ignored the disproportionate demands placed on the service by this subgroup of patients.[4] Smith *et al* found that the cost of health care per patient with somatisation disorder may be up to nine times the average.[5] By improving communication between health care professionals and adopting a consistent clinical approach they reduced these costs by over half without changing patients' health status or their satisfaction with their care.

We believe that audit is important and that its lessons should be viewed primarily in a clinical rather than a financial light. The complexities of evaluating clinical services make it difficult to say that changes in care as recommended by the Audit Commission can save 30% of all beds.

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SIR,—The Audit Commission's recent report on the use of medical beds in acute hospitals recommends that hospitals should examine their working practices and monitor the appropriateness of bed use.[1,2] Though I agree with the desired objective, I believe that the commission has relied excessively on length of stay as a measure of appropriateness and has failed to address how objective and meaningful assessments of appropriateness can be obtained.

Profiles of length of stay have several limitations, including the lack of a clear relation between diagnosis, length of stay, and appropriateness. Patients with average or short stays may have been admitted inappropriately or may have stays that are unnecessarily long. Therefore methods that target patients with unusually long stays will miss inappropriate use of beds among other patients.

Financial constraints in the United States have led to the development of utilisation review instruments designed to increase the objectivity of review and to facilitate quantification of inappropriate use of hospitals.[3] Utilisation review instruments use predetermined criteria, independent of the diagnosis, to evaluate appropriateness of use and have been shown to be much more reliable for this purpose than clinicians' unstructured and subjective opinions. They have the added advantage of identifying the reason(s) for inappropriate admission or stay and can provide a list of people, institutions, or factors considered to be responsible for inappropriate use. This information can then be used to plan service developments to improve the provision and use of services.

These tools have yet to be field tested in the United Kingdom but have been successfully used outside the United States, including in Canada and France (H E Smith *et al* and I Nicoulet *et al*, 3rd European health services research meeting, London, December 1991). As we develop strategies for improving the efficiency of use of hospitals we should not ignore the experience of our North American colleagues in monitoring appropriate use.

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SIR,—Those responsible for medical and surgical emergencies will have read with astonishment and dismay the Audit Commission's recommendations to reduce the numbers of acute hospital beds.[1,2]

It is unfortunate that these recommendations were published at a time of year when resources are stretched to the limit and many hospitals are having to turn away deserving cases and to cancel routine work because of shortages of beds. Since Christmas the two teaching hospitals in Nottingham have been taking in 30-70 acute medical admissions daily. At the beginning of the year my ward was full and, in addition, my firm had patients in 14 other wards, including gynaecology and dermatology wards. This hectic and disorganised activity is not unusual during winter months, and we are short of medical beds throughout the year. Colleagues in other district general hospitals in the midlands report similar problems.

Though I appreciate some of the commission's proposals, such as the greater use of cheaper convalescent beds and scrutiny of discharge procedures, I do not believe that medical economists and statisticians fully grasp the practical implications of busy hospitals managing unpredictable surges of admissions into wards that are already uncomfortably full.

Over the years physicians have been admitting more patients into fewer beds and shortening their stays, so that their wards are always "economically and efficiently" filled. This tight bed state has inevitable consequences: patients waiting for hours on trolleys in the accident and emergency department, patients in unsuitable wards, inappropriate discharges, and time wasted on the telephone searching for empty beds. In Nottingham, where 80-90% of our medical admissions are emergencies, we have to send home many patients dangerously early to inadequate domestic circumstances or poorly supervised care. Many are readmitted within days. This ludicrous method of dealing with emergency admissions is standard practice in many overburdened hospitals and has been forced on us by financial stringencies, bed closures, and an obsession with statistics. It is medically unsafe and legally indefensible, and our young doctors receive no sympathy from politicians or the media when things go wrong as a result.

It is time we killed the myth that rapid turnover and high occupancy of beds equate with efficiency and that empty beds indicate profligacy. In busy hospitals there needs to be much more flexibility and acceptance that a buffer pool of empty beds is necessary for crises. Though this would be more expensive, it would ease the burden on staff, be more comfortable for patients, and, most of all, be safer. Such a proposal is no more wasteful than having a fire engine on standby duty.

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Confidence intervals: enlightening or mystifying?

SIR,—As a result of pressure by medical statisticians the *BMJ*'s editorial policy requires confidence intervals to be given for the main results of a study. Confidence intervals are more informative than significance levels as a method of presenting results, being on the same scale of measurement (for example, mm Hg or incidence expressed per 1000) as the main summary statistics and being intervals within which the corresponding true population variable is likely to lie. The *BMJ* also requires that analyses should be appropriate and presented in a satisfactory manner.