In short, the rates of catheterisation and intubation influence the infection rate in a hospital but are not its only determinant. The rate of puerperal sepsis is related to the birth rate, but that did not stop Semelweis from trying to eradicate puerperal sepsis. It is nihilistic and inaccurate to suggest that current rates represent an irreducible minimum. Infection control teams should prevent hospital acquired infection through education and promotion of good practices. If some categories of infection are seen as inevitable it will be hard to motivate staff to follow guidelines, standards will fall, and the infection rate will rise. We suggest that most hospital acquired infection is preventable and that infection control teams should continue to try to prevent it.

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Increasing the number of organ transplants

EDITOR,—Colin Francome and colleagues advocate the system of organ donation known as presumed consent or opting out.¹ I recognise that some people do not believe that the NHS's organ donor register will be effective, but most of those working in organ transplantation and the public generally have welcomed it. This is borne out by the encouraging response so far: in just eight months over one million people have applied to join the register.

I note the results of the questionnaire that Francome and colleagues sent to nephrologists. A more recent survey conducted by *Which?* magazine, which is disinterested over the issue, showed that over half of the general public was actively against opting out.

Francome and colleagues assert that the medical profession is in favour of opting out. This assertion seems to be based solely on the results of the questionnaires returned by the nephrologists. The wording of that questionnaire seems to ask if they would favour a system that allowed people to opt out of organ donation. It does not include the important point that under such a scheme anyone's organs can be taken if he or she has not opted out. Every indication suggests that the medical profession is divided. Indeed, the British Transplantation Society, which is made up mainly of transplant surgeons, has indicated that it is opposed.

Although not required to do so by law, doctors always consult relatives before retrieving organs. Even if the law was changed to permit organ retrieval unless the person concerned had opted against it, doctors would be extremely unlikely to change their practice of consulting relatives. We cannot force doctors to take organs against the wishes of relatives. In some cases in the rest of Europe doctors have taken organs against the wishes of relatives, causing severe distress to the relatives and bad publicity, which does the cause of organ donation no good.

Francome and colleagues recommend the system of "weakened presumed consent," which is supposedly followed in Belgium. Officials in the Department of Health recently visited Belgium to look at its system and found that the Belgian public is not well informed about it, donation has risen greatly only in places where donors' families are not well counselled, and the system has inadequate safeguards. I am far from convinced that this change would further the cause of organ donation.

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Oral versus intravenous antibiotics

Exclusion of sickest patients invalidates study

EDITOR,—Robert Chan and colleagues conclude that oral antibiotics are as efficacious as intravenous antibiotics in treating lower respiratory tract infections acquired in the community.¹ Because of the design of their study, which excluded patients who were severely ill, any other conclusion would be surprising. Patients with lower respiratory tract infection and community acquired pneumonia are already treated at home with oral antibiotics by general practitioners, with a mortality of 0-3%.^{2,3} Furthermore, the British Thoracic Society's guidelines for community acquired pneumonia recommend oral antibiotics in moderate illness.⁴ It is therefore arguable whether there was ever any clinical need for intravenous antibiotics in Chan and colleagues' study. It follows that comparison between the three groups is clinically invalid. Many of their patients probably did not even require admission to hospital in view of the absence of radiological changes (58%) and severe illness.

I agree, however, that the route of administration of antibiotics is often inappropriate in hospital. Last year I audited the hospital management of community acquired pneumonia and found that the initial antibiotic or its route of administration was inappropriate in 27% of cases. The main reason for this was poor assessment of the severity of illness on admission. As a result of this audit a management protocol has been formulated and distributed to all junior staff.

The optimal management of lower respiratory tract infection, including community acquired pneumonia, is well established.^{4,5} What is needed is audit showing that best and cost effective practice (including appropriate admission to hospital and the prescription of appropriate antibiotics) is being carried out. Educating doctors on the accurate assessment and management of this condition is essential for this aim to be achieved.

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Authors' reply

EDITOR,—We agree that intuitively one would expect the oral route to be appropriate for antibiotic treatment of most lower respiratory tract infections acquired in the community. However, pharmaceutical advertising and, more importantly, practice in many hospitals lead to an inappropriately large number of patients receiving antimicrobial drugs intravenously (communications from doctors since our paper was published and Tsang's own observations confirm this view). What was lacking was a clinically valid study comparing the different routes of administration that would also provide evidence to support many of the current guidelines, which for some recommendations rely on consensus opinion rather than published data.

We agree that, when there is optimal support for both patients and their medical attendants, many patients could be cared for in the community. However, many patients with concomitant medical conditions or who are debilitated and elderly (the mean age in our study was 64) and live on their own are admitted to hospital because their general practitioners are unable to provide regular domiciliary visits. Coincidentally our hospital was participating in a study of the appropriateness of care, which confirmed that facilities were used to an internationally acceptable level of need for admission. The 6% mortality in our study suggests that the infections were severe enough to justify active medical and nursing care. Normal chest radiographic findings in a patient with a fever, a raised white cell count, and clinical signs does not exclude infection and many not be a valid reason to refuse admission to hospital. Furthermore, we did not influence the decision to admit to hospital.

Tsang misses the "positive" findings of our study—namely, that the oral route is more convenient for patient and staff and leads to earlier discharge from hospital. We agree that education to get this message across is appropriate.

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Provision of services for cleft lip and palate

EDITOR,—We wish to add a footnote to our paper on the provision of services for cleft lip and palate, published last year.¹ In it we drew attention to fragmented services with low volume operators and a lack of leadership from the specialty groups involved. Subsequent correspondence highlighted the threat of a war between competing surgical disciplines.²

Happily, this situation has now been corrected with the drawing up of national guidelines by a multidisciplinary steering group, which included consumer representatives, under the aegis of the Royal College of Surgeons (available from the college's Surgical Epidemiology and Audit Unit on request). These guidelines emphasise the necessity of strictly coordinated care by a regionalised hospital and community based team in which the principal providers—surgeon, orthodontist, and speech therapist—treat no fewer than 30 new patients annually. There are several reasons for

this criterion. Firstly, the more challenging cases, such as cases of bilateral clefts, occur so rarely that surgeons seeing five or 10 cases of cleft lip annually might operate on this subtype only once every two years. Secondly, occasional operators tend to be supported by an incomplete network of other inexperienced professionals.¹ Thirdly, cleft lip and palate is expressed with considerable heterogeneity, and the homogeneity of 40 unilateral cases is necessary for statistical discrimination of clinically relevant variation in surgical performance.³ For surgeons seeing only five new patients annually, 28 years would have to elapse before audit could be performed. Finally, previous research has been hindered by small samples and dependence on weak design.⁴ Peter Ward Booth refers to a form of repair whose early results "show great promise,"² but such hopes litter the history of care in cleft lip and palate, and systematic reviewing according to the protocols of the Cochrane Collaboration shows that randomised trials have been used rarely (J F C Tulloch, American Cleft Palate Association meeting, Tampa, Florida, April 1995). Thus rationalisation of services is a prerequisite for worthwhile research.

The steering group has not assumed that surgeons from any particular discipline have a natural right to perform primary surgery, bone grafting, or osteotomy of the jaw and will consider instead training pathways for future specialists. It also proposes the instigation of national audit and accreditation of centres by peer review.

Concentration of cases into the hands of high volume operators provides no guarantees but establishes the optimum conditions for best practice and monitoring. Given the overhaul of services now required, the heroes of the hour may be not the clinicians who step forward but those who step back.

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Health care rationing

Implicit rationing should take place within a framework

EDITOR,—Though I agree with David Mechanic that all health care systems should use a mixture of rationing mechanisms, I have some reservations about placing too much reliance on the discretion of professionals to determine the clinical allocation of services.¹ I have no doubt that many carry out this function in a rational and well informed manner with due regard for budgetary restraint, and as a result the NHS is an efficient health care system. Unbridled implicit rationing, however, allows clinical freedom to foster vested interests and to breed inefficiency. For example, the drug treatment of intermittent claudication costs the health service over £25m a year, but the consensus is that this form of treatment is ineffective.²

Professionals have a clear responsibility of virtue and duty to individual patients, which will often

conflict with a broader social ethic. The nettle of explicit allocation of resources has to be grasped by central government and purchasing authorities to allow professionals to practise implicit rationing within a well defined framework.

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Implicit rationing is not open to public scrutiny

EDITOR,—David Mechanic invokes the Royal Bank of Sweden's prize in economics given in memory of Alfred Nobel to underpin Herbert Simon's apparent favouring of implicit as opposed to explicit rationing.¹ Other well known recipients of this prize (endowed in 1968) include F A Hayek and M Friedman. At about the same time as Simon was writing, Hayek identified rationing as a problem that would face nationalised health care systems and concluded that the most dangerous aspect of this was that "a system that gives the indispensable helper of the individual, who is at the same time an agent of the state, an insight into the other's most intimate concerns and creates conditions in which he must reveal this knowledge to a superior and use it for the purposes determined by authority opens frightening prospects."²

Explicit rationing is a form of open government. As Mechanic points out, it runs the risk of being buffeted by conflicting pressure groups. Implicit rationing is ruling in secrecy. It requires government inquiries and commissions to police it. Mechanic cannot really believe that his sentence "I suspect that the rich and powerful if sufficiently motivated will always find ways to circumvent explicit criteria" does not apply to implicit rationing too: it applies even more so. Likewise, had the investigation into how to dispose of the Brent Spar oil platform been done openly, the platform would probably now be resting on the seabed rather than being dismantled. Indeed, the strength of open decisions is that it is easier to take remedial action, as illustrated in Sweden, where all 14 directors of its Medical Research Council were recently made to resign.

In 1863 Lincoln expounded the United States constitution for all time.³ He finished with the phrase "that government of the people, by the people, for the people, should not perish from the earth." Surely it is in this spirit of responsibility and accountability that we should reform the NHS.

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Muddling through leaves matters to chance

EDITOR,—David Mechanic concludes his article on rationing in health care services by saying that at the micro level this must be "left for doctors and patients to work out among themselves" and that "once the boundaries are set, more is gained by muddling through rather than by trying to establish all the rules beforehand."¹ He uses the example of access to haemodialysis, for which

acceptance rates in the United Kingdom have lagged behind those in most of western Europe and in North America over the past two decades, particularly among elderly people and those with diabetes.² Unfortunately, there is considerable evidence of inequitable distribution of dialysis resources in the United Kingdom.³

Extremely difficult life or death decisions have too often depended on individuality and chance; there has been minimal medical training on how to discuss these issues with the patient openly and honestly. Is the current structure for this sort of decision making appropriate? Use should be made of multidisciplinary teams to reduce individual bias, particularly because increased caseloads mean that modern renal physicians are unlikely to know their patients as well as in previous decades. Guidelines on the process of the decision making would be useful to ensure that all aspects are considered and to protect patients' autonomy. Careful documentation of that process would facilitate audit.

However health care is funded, it will not be possible to provide all the care available to all those who might benefit. Those responsible for making decisions about the allocation of scarce resources must be publicly accountable and sensitive to the ethical dimensions of their judgments. We can do better than muddle through.

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Bone densitometry in clinical practice

Clinical uses of densitometry are not yet proved

EDITOR,—J E Compston and colleagues review the indications for bone densitometry in clinical practice.¹ They agree with the conclusions of the *Effective Health Care* bulletin that there is insufficient evidence to justify screening women at the menopause.² Several of their other recommendations, however, do not seem to be supported by the evidence.

The authors propose that bone densitometry should be used, for example, for people with strong clinical risk factors. This is justified only if the information provided by the test can influence decision making in a way that improves the effectiveness or cost effectiveness of treatment.³ However, no evidence is cited to show that decision making is improved as a result of bone densitometry in people at increased risk of fracture due to accelerated bone loss. Since the presence of multiple risk factors is more important than the result of bone densitometry in predicting hip fracture in older white women⁴ it is important to show the extra value of densitometry. No data are presented to support the view that management decisions that take into account the results of densitometry improve outcomes or reduce costs when compared with decisions that do not take into account these results.

This lack of evidence also applies to other recommended uses, such as the monitoring of treatment. The precision of measurements of bone density in routine settings is not well documented and is likely to be lower even than that reported by the manufacturers. On the basis of the figures