This essentially utilitarian approach seems to be favoured by economists and by those politicians who favour an arrangement whereby those who can afford to do so are allowed to opt out. The other approach would seek to distribute health care in accordance with the individual need for it, so that the total effect of its distribution would be to reduce health inequalities. Such an approach entails two main difficulties: the identification of need and the appropriate distribution of care. It may seem surprising that these requirements are difficult as it has been traditional to concentrate medical care on those who are ill. The difficulties arise, however, from the need to concentrate most care on those most in need while withholding the supply of care from those who are less seriously ill. It is generally those who are most in need who lack the ability to ensure that their needs are met.

The principal reasons why these well recognised problems have yet to be solved is that they are difficult and essentially political problems rather than issues of management. For so long as we try to claim that the NHS should be kept out of politics we shall fail to confront and therefore to resolve the central dilemmas.

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Health and efficiency

SIR,—The recent leading articles by Drs Richard Smith and Tony Delamothe (6 June, p 1438 and 1440) and newspaper articles such as the report of an orthopaedic surgeon's difficulty in admitting elective cases through lack of funding for extra beds¹ highlight the urgent need for more effective use of National Health Service resources. As Sir Brian Thwaites points out, these resources will inevitably fall further and further behind expectations for health care.

In orthopaedics day surgery is currently the fashionable method of reducing the requirement for expensive hospital inpatient care. While its usefulness is undoubted, the potential for savings is limited as it affects only short stay patients. The estimated 37 500 elderly patients who sustain hip fractures each year constitute a group in which more efficient management is urgently needed.² The percentage of the population over 75 is steadily rising, and the incidence of such fractures is increasing. Currently, this group occupies about 18% of orthopaedic beds,³ and the average stay has been quoted to be as high as 40 days.⁴ Moreover, many never regain their preinjury state, particularly when technical failure has occurred.⁴ Clearly, the potential for savings in this group is enormous.

A trial scheme operating at Peterborough is primarily designed to offer a better service for patients with hip fracture but also shows the way to release hospital beds for elective patients, such as those needing joint replacement. All patients with hip fractures are managed by a single team. The hospital team comprises a full time surgeon supported by a part time anaesthetist, a theatre sister, an operating department assistant, and a radiographer. Rapid effective surgery allows the patient to be mobilised and discharged home very early to the unique Peterborough hospital at home scheme. Close liaison between the surgeon, occupational therapist, physiotherapist, and community liaison sister ensures that planning for discharge starts on admission. The hospital at home scheme enables patients to be nursed in their own homes for up to 24 hours and provides the level of care that these patients initially require for home rehabilitation.

We find that patients regain their confidence and return to their normal activities more rapidly in

their familiar home surroundings. In the first six months of the scheme 366 inpatient days were saved compared with the same period in the previous year, and this is expected to improve as the project becomes more familiar to all concerned. Home rehabilitation of these patients is not only more effective⁵ but is actually cheaper and in the long term does not require much more work on the part of the community services as the transition from hospital to home of this frail group is more carefully controlled and streamlined than with conventional discharge.

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Exaggerated postural vasoconstrictor reflex in Raynaud's phenomenon

SIR,—Dr Niels Olsen and colleagues (9 May, p 1186) assume that any changes in xenon-133 clearance necessarily reflect changes in blood flow. The venous stasis test that they describe, however, is in effect a low pressure tourniquet, which could produce all manner of effects at capillary level from simple mechanical disturbances to metabolic ones. My own work, for example, on subcutaneous sodium-24 clearance has shown similar postural changes, but the changes also correlated almost perfectly with changes in venous pressure and were influenced by alterations in tissue pressure.¹ The tourniquet effect produced by 4 ml local anaesthetic might have affected their results in much the same way as the blood pressure cuff used for their venous stasis test—that is, mechanically, not neurologically.

It also worries me that the authors' whole argument for and against Raynaud's and Lewis's hypotheses turns on just two patients in whom this possible local reflex was blocked. Dr Olsen and coworkers therefore may well have shown a difference between the clearance of xenon in controls and patients with Raynaud's phenomenon. As the clearance of isotopes may be shown to be influenced by factors other than blood flow, however, they are not entitled to conclude that the difference is due to "hyperreactivity of the central sympathetic nervous system."

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AUTHORS' REPLY.—We agree with Dr Chant that changes in xenon-133 washout rate constant do not always reflect changes in blood flow. For that reason, our experiment was designed in accordance with recommended guidelines to eliminate methodological, physical, and physiological sources of error.¹⁻⁴ A possible tourniquet effect produced by 4 ml local anaesthetic should decrease the washout rate constant of our first reference period (k_1) compared with that in patients without nerve block. Such decreases in k_1 values were not, however, seen in this study or in another of 32

subjects,⁵ and thus the volume of lignocaine was not found significantly to compress the veins draining the investigated region. In addition, the systolic blood pressure distal to the block was equal to that in patients without nerve block. Thus no mechanical effect of nervous blockade was shown to influence our orthostatic stress test. In the venous stasis test we intended to produce a venous distention mechanically to elicit the local sympathetic venoarteriolar axon reflex mechanism,^{2,3} having a threshold of about 25 mm Hg, which mediates a non-graduated consistent vasoconstrictor response.^{2,3}

The region investigated was about 6-7 cm distal to the base of the finger, at which nervous blockade was applied. This distance significantly exceeds the radius of action of the local sympathetic reflex.^{2,3} Consequently, a constant washout rate of the orthostatic stress test under nerve block conditions in the two subjects investigated suggests an abolition of central and not local sympathetic reflex mechanisms. We agree, of course, that more studies are warranted to corroborate our results. Evidence already exists, however, of cutaneous and subcutaneous vasoconstrictor responses to increased venous transmural pressure and to orthostatic stress of the body and their underlying mechanisms.^{2,3,6-9}

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Special units for acute upper gastrointestinal bleeding

SIR,—Dr Michael W Dronfield (23 May, p 1308) suggests that the results of managing patients with acute upper gastrointestinal haemorrhage may be improved by a specialist team approach in teaching hospitals or close cooperation between medical and surgical gastroenterologists in district general hospitals. Experience in the Western Infirmary in Glasgow, a teaching hospital in an area with a high incidence of peptic ulceration, strongly supports Dr Dronfield's argument.

In the five years 1968-72, 1011 patients with suspected acute upper gastrointestinal haemorrhage were managed at this hospital using traditional methods. The overall mortality was 15%, with a 48% mortality for the 113 patients who presented in shock. In 1977 a haematemesis management team was formed, consisting of consultant physicians and surgeons with an interest in gastro-