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.

ALWYN SMITH

Department of Epidemiology
and Social Oncology,
Manchester M20 9QL

Health and efficiency

SIR,—The recent leading articles by Drs Richard Smith and Tony Delamothé (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.

G A PRYOR
J W MYLES

Peterborough District Hospital,
Peterborough PE3 6DA

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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."

A D B CHANT

Royal South Hants Hospital,
Southampton SO9 4PE

- 1 Chant ADB. The effects of posture, exercise and bandage pressure on the clearance of ²⁴Na from the subcutaneous tissues of the foot. *Br J Surg* 1972;59:552-5.

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}

NIELS OLSEN
OSCAR ULF PETRING
NIELS ROSSING

Rigshospitalet,
University of Copenhagen,
Copenhagen,
Denmark

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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-

intestinal haemorrhage. The basic aims of the team were to provide early endoscopy for patients suspected of having had an acute upper gastrointestinal bleed and subsequently to manage such patients as a cooperative medical and surgical venture with total continuity of care.

In the three years 1983-5 haematemesis team members performed endoscopy in 1574 patients with clinical evidence of upper gastrointestinal haemorrhage. The overall hospital mortality for this group was 3.9%. Bleeding from a gastric ulcer carried an overall mortality of 4.8%, while duodenal ulcer haemorrhage carried an overall mortality of 1.9%. Clearly, no single factor can claim total responsibility for the striking improvement in our hospital mortality for acute upper gastrointestinal haemorrhage. We believe, however, that the team approach, which we have now used for 10 years, has contributed very significantly to our results.

W R MURRAY
G G BIRNIE

Western Infirmary, Glasgow G11 6NT

Asymptomatic carotid stenosis: spare the knife

SIR,—Dr Peter Sandercock (30 May, p 1368) discusses the case against carotid endarterectomy for asymptomatic carotid bruit and comments that in the United Kingdom this operation is performed mostly for symptomatic carotid disease.

It has been established that 98% of vascular surgeons in the United Kingdom (in 1984) rarely or never performed carotid endarterectomy for asymptomatic bruit, and I suspect that in Britain Dr Sandercock is preaching to the converted.¹ He also makes the point that carotid angiography is itself hazardous and that some patients may undergo such studies because "the facilities for ultrasound assessments are not widely available in the United Kingdom." This is not so. Of the 40 surgeons in this country who performed more than 10 carotid endarterectomies in 1984 and who were responsible for 1134 (83%) of the total operations done in that year, no fewer than 33 (83%) used ultrasonography as a screening test.² They did this for symptomatic disease, and I would submit that for asymptomatic disease their use of ultrasonography would be even more pronounced. The few surgeons who did not use ultrasonography generally used the less hazardous digital subtraction angiography rather than conventional angiography in their assessment of carotid artery disease.³

In summary, I believe that non-invasive screening is the usual technique used by vascular surgeons in the United Kingdom to assess a patient with asymptomatic carotid bruit. Few surgeons would, in any event, advocate angiography (conventional or otherwise) for patients who were not about to undergo arterial reconstruction, and the evidence is that such reconstructions, in the case of the carotid artery, are rare on this side of the Atlantic.

J A MURIE

Nuffield Department of Surgery,
University of Oxford,
John Radcliffe Hospital,
Oxford OX3 9DU

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SIR,—Most vascular surgeons already spare the knife in patients with asymptomatic carotid

stenosis on the grounds that it is difficult to make an asymptomatic patient better, but is Dr Peter Sandercock (30 May, p 1368) aware of the risk of stroke if these patients are left untreated? The results of several studies using ultrasound scanning¹⁻³ and intravenous digital subtraction angiography⁴ show that those with severe (more than 75-80%) carotid stenosis have a high risk of stroke, transient ischaemic attack, and internal carotid artery occlusion. By contrast, less severe stenoses are associated with a good cerebral prognosis.

The nature of the atherosclerotic plaque is as relevant as its size. The stroke risk of a fibrous, ultrasonically homogeneous plaque is much less than for a plaque distorted by haemorrhage within it.² This is shown as a heterogeneous pattern on ultrasound imaging. The wisdom of aspirin treatment in patients with severe carotid stenosis has been questioned as intraplatelet haemorrhage could result from its antiplatelet effects.³

What, therefore, should be done to allay the anxieties of a patient with a carotid murmur? If ultrasound scanning shows that the carotid bifurcations are clear the patient may safely be reassured. The findings of a severely stenosed heterogeneous plaque should cause even diehard non-interventionists to think twice. Perhaps the best their patient can hope for is that any cerebral infarct will be preceded by a transient ischaemic attack, which would allow the doctor to reassess the pros and cons of a timely endarterectomy.

M I ALDOORI
R N BAIRD

Department of Surgery,
Bristol Royal Infirmary,
Bristol BS2 8HW

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Management of Parkinson's disease

SIR,—We were disturbed to find no mention of surgical thalamotomy in Dr F B Gibberd's clinical algorithm on the management of Parkinson's disease (30 May, p 1393). While we accept that the optimal treatment for Parkinson's disease should be effective drug treatment, there is no doubt that the currently available drugs, like thalamotomy, at best alleviate some of the symptoms of the disease and are not curative. The serious inadequacies of long term levodopa treatment are now well known,^{1,2} and there is a considerable dilemma regarding the timing of such treatment: whether to use it early, when the patient can benefit most, or later, when all other treatments have failed.³

Thalamotomy, rather than protracted levodopa treatment, may be the appropriate treatment for the younger or fitter patient with shake, particularly when this is lateralised and in the non-dominant limbs, and it is also appropriate when the complications related to levodopa, particularly dystonic movements, have progressed to the point of incapacity.⁴ The continuing need for thalamotomy has been well argued,⁵ and we have annotated a range of indications in a report to be published in the *British Journal of Neurosurgery*.

Contemporary thalamotomy, using improved

targeting methods and refined lesion making, is much safer than that used before levodopa was introduced, when it was the only form of treatment available and often used inappropriately. For the type of patient described we would suggest that thalamotomy provides a more acceptable option than the toxic complications and insufficient treatment that seem to be the bottom line of the algorithm.

JOHN MILES
R M REDFERN

University Department of Neurological Sciences,
Walton Hospital,
Liverpool

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AUTHOR'S REPLY.—I agree with Mr Miles and Mr Redfern that surgically induced lesions in the brain may be used in the treatment of Parkinson's disease; these were often used in the past, but the indications for thalamotomy are now few and rare. In the algorithm the penultimate box under drug treatment suggests referral to a specialist or neurologist at hospital. The specialist or neurologist would be in a position to consider the rare circumstances in which thalamotomy might be advised. To have included surgery in the algorithm would have given undue weight to surgical procedures. The many methods of managing patients with Parkinson's disease could not be included in a simple algorithm, and I am sure that there are other aspects of the care that, in occasional instances, should be considered.

I am interested to learn that Mr Miles and Mr Redfern are to publish a report on the indications for thalamotomy, and I look forward to reading it. It may be that future techniques will make the use of thalamotomy more common, but at present I would expect it to be used on only the rarest occasions.

F B GIBBERD

Westminster Hospital,
London SW1P 2AP

What happens to opiate addicts immediately after treatment?

SIR,—The most important point made by Dr Michael Gossop and coworkers (30 May, p 1377) concerned the need for aftercare services to support addicts immediately after discharge from hospital.

Those who have stopped misusing drugs on their own, with help from voluntary groups or medical care, often remark on how bored they have become as their days are no longer filled by efforts to obtain and pay for drugs. For some adjustment to a new lifestyle is possible without support, but for others the boredom turns into resentment that, having made some effort to conform to society's wishes to "say no" and "give up drugs," they have to go it alone. Most funding for drug misuse projects has been directed towards health education, prevention, and services to support those with acute problems, and, as far as I am aware, there are