TALKING POINT

Supply and demand in the NHS

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It has become fashionable to look at the total number of patients recorded as waiting for hospital inpatient admission and to draw from fluctuations in the figure inferences about the state of health of the NHS. But this implies a misunderstanding of what this total represents and of the true indices of the efficiency of the Service in delivering hospital care. When referring to waiting lists we are talking not about the NHS but about hospital services, which account for 55.7% of the total budget, and effectively only about surgery, which accounts for half of the patients treated in hospital. Of those waiting for treatment 96% are in the surgical specialties and 74% in only four—general surgery (26%), traumatic and orthopaedic surgery (16%), otorhinolaryngology (18%), and gynaecology (14%).

The list represents only those patients who have been referred for consultant opinion by their GPs, who have been judged to need hospital treatment or investigation, and who must wait because the required facilities or beds are not immediately available. This presented demand arises from an unquantified reservoir of morbidity in the population; potential patients in the community who have conditions susceptible to treatment but who have either not been placed on the waiting list by a consultant, have not been referred for consultation by their GPs, or have not presented themselves to GPs for treatment. As patients are removed from lists, therefore, others step forward at the same or, as recently, a greater rate to replace them—hence the concept of the clinical iceberg.

The size of the lists is determined by a number of interacting factors, which at any one time combine to bring fewer or more of these potential patients out of the community into the hospital consulting room and thence on to the list. These factors include fluctuations in the level of morbidity in the population; changing public expectations of the ability to treat it; the development of surgical techniques; changes in the availability of resources depending on health authorities' investment decisions and the ability to manage resources efficiently; demographic changes; seasonal influences; consultants' clinical decisions; and the referral practices of general practitioners.

Variations in referral

The last show definite variations. Referral rates may vary from under five per 1000 patients seen to 115 per 1000¹ and from 0.6% of patients on a practice list per year to 25.8%.² This variation cannot be readily explained in terms of population characteristics or the distribution of morbidity.³ Referrals, too, may vary with proximity of the patient's home to the GP's surgery and the hospital. A Scottish study of 1972⁴ found the estimated referral rate of new outpatients living less than three miles from their GP's surgery to be nearly twice that for patients who lived at a greater distance. It also found an inverse relationship between the rate of referral and the distance between the patients' home and the outpatient clinic. One general practice in Kent achieved a halving in total hospital referrals in the 20 years to 1970 and a 35.5% reduction in hospital admissions,

without any obvious fall in quality of care.⁵ There is some evidence, too, that GPs with high referral rates also have high admission rates.⁶ So far as hospital admissions are concerned, a study of 177 large acute general hospitals showed that both admissions and length of stay increased with bed availability.⁷

The maintenance of the list size thus depends chiefly on the referral practices of GPs and the factors which condition them, and on levels of provision, the outcome being changes in the threshold of severity of disease at which consultants place patients on the list. If health regions are compared, on taking 1978-9 revenue allocations for the total hospital and community health services as a percentage of RAWP target, there is no association between overprovision or underprovision and the size of the waiting list (see table). North-western Region,

Waiting lists per 1000 population

Health regions (England)	Waiting list/1000 population (March 1978)	1978-9 allocations as percentage of RAWP target
Yorkshire	10.2	96.6
South-west Thames	10.5	106.1
Northern	10.8	92.5
Trent	12.0	92.6
North-east Thames	12.2	113.5
Mersey	12.2	97.7
North-west Thames	12.4	114.2
East Anglia	12.5	94.7
Wessex	12.7	96.1
South-east Thames	12.9	111.5
Oxford	14.8	101.7
West Midlands	14.9	94.2
South-western	15.1	96.4
North-western	15.6	92.0

furthest from its RAWP target, has the largest list; but Oxford, above its target, is in the upper quartile of list size and Yorkshire, below its target, has the smallest list.

General practitioners increase the rate of referral from the reservoir of morbidity to keep pace with increased hospital throughputs. This is the iceberg effect and it seems likely that no level of resources which the community might reasonably be expected to make available for hospital and community health services is likely to melt it completely. The "problem" of waiting list size will always be with us. Certainly there is no evidence that an increase nationally in available resources will lead to a reduction in lists. Between 1965 and 1976 the proportion of the gross domestic product which we spent on the NHS rose from 4.1% to 5.7%. This represents an increase in expenditure of £800 million at 1970 prices, an increase of 46% in real terms in the NHS budget. At the same time hospital activity and manpower levels increased. The number of inpatients treated during 1977 in NHS hospitals in England, over 5.3 million, was an all-time record and represented an increase of 18% in the 1965 figure (4.5m). In the decade to 1976 average length of stay in the acute surgical specialties fell from 10.3 to 8.6 days. Between 1971 and 1976 consultants in acute specialties (whole-time equivalent) increased by 18.8% (from 7088.9 to 8421.3) and other medical staff by 20.7% (from 12 561 to 15 165.3). Similarly, in that period, total nursing staff (wte) in acute and mainly acute hospitals increased by 17.6% (from 113 581 to 133 611) and registered nurses by 19.5% (from 37 667 to 45 024). Yet between 1965 and 1977 waiting lists grew by 22.3% (from 492 129 to 602 091).

Taxation of consultants' mileage allowances

Procedure agreed with Inland Revenue

In the CCHMS's recent statement of advice on the application of Income Tax to consultants' emoluments, particularly mileage payments (20 January 1979, p 209), one aspect was left unclear because discussions were still in progress between the profession's representatives and the Inland Revenue. This concerns the taxation of payments for journeys made when a consultant is recalled to hospital to provide emergency care for a patient. The CCHMS states that its representatives have explained to the Inland Revenue that a consultant is not "recalled" but is rung up for advice and instructions and, on the basis of information given to him, decides that he should return to the hospital. In these circumstances, the consultant has already accepted responsibility for those aspects of the patient's care appropriate to his specialty before leaving home and consequently, in the light of the relevant case law, he is already at work and the payment for the journey back to hospital is not subject to income tax.

The Inland Revenue has now accepted that, in such circumstances, exemption from tax may be claimed and a simplified procedure has been agreed which will avoid the necessity for employees to establish their case individually with their local tax inspectors. Health authorities have been advised by the DHSS that, in future, claims for travelling expenses should incorporate the following certificate:

"Except where indicated above I certify that advice on the handling of the emergency was given before starting my emergency call-out journeys and I accepted full responsibility for those aspects appropriate to my duties from that time. (Journeys which I do not consider qualify for tax relief are shown separately above.)"

As a temporary measure authorities have been asked to make available a supply of certificates which can be separately signed and

attached to claims by the claimant. Where the certificate has been signed emergency travelling expenses will not be taxed under the PAYE system but tax will be deducted when the certificate is unsigned or deleted by the employee or where the employee has indicated that particular journeys do not qualify for tax relief.

These arrangements operate from 1 May 1979 and have been notified to health authorities in circular HC(79)12, dated April 1979. *The CCHMS emphasises that this arrangement applies only to emergency journeys to the principal hospital as journeys to other establishments are not liable to tax in any event.*

Health Services Board

Fifth set of revocation proposals

The Health Services Board has written to administrators in 12 regional health authorities with their proposals for the fifth phase of pay-bed revocations, which have to be submitted to the Government by 30 September. The proposals would reduce pay-beds in England by 177 and the board's assessment of demand will again be based primarily on statistics of average daily pay-bed occupancy. It thinks that there might be less than reasonable demand for the full number of currently authorised beds in a hospital or group of hospitals where average daily pay-bed occupancy in 1977 and 1978 was not higher than 60% of the current authorisations.

Representations to the board should be made by 18 July and the board has emphasised that it will attach most weight to verifiable factual information. Generalised objections will be of little help. The board would like to know, for instance, whether private sector facilities are insufficient for the demand made on them or whether the daily occupancy figures are not a fair indicator of demand because of particular local circumstances.

Consultants requiring advice on the board's proposals should contact the Secretary, BMA House, Tavistock Square, London WC1.

Future plans

There were 2819 pay-beds in NHS hospitals at 31 December 1978 and the Health Services Board hopes that underused pay-beds and private consultation facilities will be phased out of the NHS in mid-1982. The board's recently published 1978 annual report (HMSO, price 60p) reported that the demand for pay-beds had been declining. While understanding the difficulty in collecting data, the board expressed its appreciation of the fact that the medical profession in Scotland were willing to allow fully detailed, but anonymous, diagnostic information to be supplied by Scottish health authorities. The board was sorry that colleagues in England and Wales were not prepared to follow their example.

Supply and demand—continued

Increase in health care

The benefits of this increased provision are likely to be not only that with advancing technology more patients are given effective treatment but also that patients with less serious conditions are treated, or with conditions—perhaps more serious—that are less susceptible to effective treatment. The figures must mean that there has been a quite considerable increase in health care of the population taken as a whole—the reverse of what is frequently suggested. This error derives from a failure to understand that in global terms more resources mean more patients treated and more patients waiting for treatment.

It is a truism that an increase in health services supply tends to stimulate demand which is for practical purposes limitless. Nevertheless, the possibility of diminishing returns arises together with problems of investment—among specialties, between treatment and care, and (in the teaching areas particularly) among service and research and development. The time has come to make a serious attempt at valuation in medical, social, and economic terms of different health services to provide a rationale for investment decisions by health authorities. The first phase of the NHS from 1948 to 1974 in the main achieved

its objective of establishing common standards of treatment in hospitals throughout the country. It is a phase which is now behind us. In this, the second, phase we must recognise the obligation to make in each locality explicit decisions to develop some services at the expense of others. To continue to pursue national targets in *every* sphere, which can never be achieved, serves only to generate frustration and perhaps also to demoralise staff.

References

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- 6 Ashford, J, and Pearson, J G, *Journal of the Royal Statistical Society*, 1970, 3, 95.
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