- 4 Laxdal OE, Merida J, Jones RHT. Treatment of acute otitis media: a controlled study of 142 children. *Can Med Assoc J* 1970;102:263-8.
- 5 Halsted C, Lepow ML, Balassanian N, Emmerich J, Wolinsky E. Otitis media: clinical observations, microbiology, and evaluation of therapy. *Am J Dis Child* 1968;115:542-51.
- 6 Howie VM, Ploussard JH. Efficacy of fixed combination antibiotics versus separate components in otitis media. *Clin Pediatr (Phila)* 1972;11:205-14.
- 7 Engelhard D, Strauss N, Jorczak-Sarni L, Cohen D, Sacks TG, Shapiro M. Randomised study of myringotomy, amoxycillin/clavulanate, or both, for acute otitis media in infants. *Lancet* 1989;ii:141-3.
- 8 Fry J. Antibiotics in acute tonsillitis and acute otitis media. *BMJ* 1958;ii:883-6.
- 9 Medical Research Council. Acute otitis media in general practice—report of a survey by the Medical Research Council's working party for research in general practice. *Lancet* 1957;ii:510-4.
- 10 Fromm J, Culpepper L, Grob P, et al. Diagnosis and antibiotic treatment of acute otitis media: report from International Primary Care Network. *BMJ* 1990;300:582-7.
- 11 Van Buchem FL, Dunk JHM, Van 'T Hof MA. Therapy of acute otitis media: myringotomy, antibiotics or neither? *Lancet* 1981;ii:883-7.
- 12 Van Buchem FL, Peeters MF, Van 'T Hof MA. Acute otitis media: a new treatment strategy. *BMJ* 1985;290:1033-7.
- 13 Mygind N, Meistrup-Larsen K-I, Thomsen J, Thomsen VF, Josefsson K, Sorensen H. Penicillin in acute otitis media: a double-blind placebo-controlled trial. *Clin Otolaryngol* 1981;6:5-13.
- 14 Diamant M, Diamant B. Abuse and timing of use of antibiotics in acute otitis media. *Arch Otolaryngol* 1974;100:226-32.
- 15 Mills R, Uitley A, McIntyre M. Relationship between acute suppurative otitis media and chronic secretory otitis media: role of antibiotics. *J R Soc Med* 1984;77:754-7.
- 16 Jerger J. Clinical experience with impedance audiometry. *Arch Otolaryngol* 1970;92:311-24.
- 17 Altman DG, Gardner MJ. *Statistics with confidence*. London: BMA 1989.
- 18 Teele DW, Klein JO, Rosner B, et al. Epidemiology of otitis media during the first seven years of life in children in greater Boston: a prospective cohort study. *J Infect Dis* 1989;160:83-94.
- 19 Kaleida PH, Casselbrandt ML, Rockette HE. Amoxycillin or myringotomy or both for acute otitis media. Results of a randomized clinical trial. *Pediatrics* 1991;87:466-74.
- 20 Chaput de Saintonge DM, Levine DF, Temple Savage I, et al. Trial of three-day and ten-day courses of amoxycillin in otitis media. *BMJ* 1982;284:1078-81.
- 21 Bain DJG, Murphy E, Ross F. Acute otitis media: clinical course among children who received a short course of high dose antibiotic therapy. *BMJ* 1984;288:762-4.
- 22 Jones R, Bain J. Three-day and seven-day treatment in acute otitis media: a double-blind antibiotic trial. *J R Coll Gen Pract* 1986;36:356-8.

(Accepted 17 May 1991)

The Future of General Practice

Funding family health services

David Taylor

*Building Your Own Future*¹ offers a refreshing break with the past. It raises many questions previously glossed over, and its publication offers hope that the period after the next general election could be one in which health care policies can be based more on reason and mutual agreement rather than dogma and conflict.

However, good intentions alone do not guarantee anything. A commonsense awareness of the resource restraints and differences of interest that affect the United Kingdom's health and social care system will always be needed to help generate a sound sense of the attainable. In this article I therefore briefly examine some of the broad economic factors which have influenced recent developments in general medical practice and will continue to affect the future of primary care in Britain. I do so in the context of questions suggested in *Building Your Own Future* (box).

Control of NHS expenditure, 1981-91

From the start of the 1980s spending on the NHS has been maintained at about 6% of the gross national product (fig 1). Other areas of public expenditure, notably housing, have been more severely restricted, and the NHS has enjoyed real growth in its resources because of the overall expansion of the economy. Nevertheless, control of spending relative to national

FIG 1—NHS expenditure as percentage of gross national product, United Kingdom 1949-90 (R Chew, personal communication)

wealth has clearly been an important goal of health policy during the past decade.

In the hospital and community health sector the cash limits system introduced during the 1970s helped to make strict cost containment possible. But the family health services retained a funding system based on a separate "open ended" parliamentary vote, ostensibly because of the need for flexibility to finance variable demands for items such as medicines. (Although family health services account for only 20% of total NHS costs, 80% of all NHS medicines by value are dispensed by family health services contractors.)

The treasury has always feared that family health service outlays might exceed planned limits, either driving up overall public expenditure or forcing compensatory cuts in the hospital and community sector or elsewhere. But general medical and pharmaceutical services in fact accounted for a relatively stable—and, in the case of the general medical services, falling—proportion of NHS costs during the 1960s and 1970s (fig 2). Also, any overspend in such services is likely to be limited compared with overall government outlays. Nevertheless, the health departments were obliged to commission in 1982 the Binder Hamlyn study of family health service funding.

This exercise was followed by a cascade of events and

Financial questions raised in *Building Your Own Future*¹

- Does the open nature of the general medical services prevent cash limits being applied?
- To what extent has the uncompromising opposition of the GMSC to cash limits led to presently unsatisfactory arrangements for applying cash limits on staff and premises spending?
- Should there in future be a single cash limit for the whole of NHS expenditure or separate cash limits for primary and secondary care?
- Does the GP fundholding model offer an appropriate vehicle for the future application of cash limits?

King's Fund Institute,
London NW1 7NF

David Taylor, BSC, fellow in
health policy analysis

BMJ 1991;303:562-4

FIG 2—Costs of general medical and family practitioner pharmaceutical services as percentage of gross NHS costs, 1949-90 (R Chew, personal communication)

initiatives, most attempting to control family health and broader NHS costs. The strategies explored during the 1980s and introduced through reforms such as those contained in *Promoting Better Health, Working for Patients*, and the 1990 general practitioners' contract include the following.

- Strengthened health service management. Introducing general management and linking incentive payments to performance in keeping within budgets are potentially powerful financial control mechanisms. They also challenge some aspects of professional authority and individual patient choice
- Increased price and quality competition between NHS hospitals and family practitioners.² The creation of the purchaser-provider division and the general practitioner fundholding initiative belong to this category of expenditure control. The indicative amounts scheme for controlling the cost of medicines is also in this category as it is designed to increase general practitioners' awareness of pharmaceutical product prices and alternatives without rigidly limiting use of resources
- Increased competition for resources between NHS and independently owned care providers. This is an extension of the above strategy and places even more emphasis on the identity of the NHS as a care purchaser for the population rather than as the exclusive direct provider of services
- Increased copayments by NHS patients. These may appreciably reduce the tax raised expenditure required to maintain a service—as in the case of dentistry—and could, in theory, further enhance patients' motivation to select better value providers and health care products. But such a strategy, rigorously applied, could reduce access to care
- Full privatisation of supply. The withdrawal of NHS funding and provision altogether, as in some aspects of ophthalmic care.

Britain has not been alone in experimenting with such mechanisms. During the past decade most developed countries have made trial and error adjustments to health care funding of one sort or another, driven by a desire to limit public or overall service costs. The impact of these actions, particularly in terms of value for money rather than merely cost limitation, is not yet clear. Nevertheless, overall health spending seems generally to be most effectively limited by systems which are tax funded and in which central governments allocate global budgets to regional and district authorities to manage. Increasing the proportion of health care paid for privately (for instance, by top up insurance systems) may be linked with higher gross expenditures, as may overt politicisation of delivery at local levels.^{3,4}

Other factors associated with health care costs

include the overall wealth of the community (richer countries tend to spend more of their purchasing power on health than poorer ones); the age structure of the population served; the degree to which professionals can profit directly from providing higher cost care; and the extent to which consumers have explicit, personal rights of access to care as distinct from "population based" rights to care. By definition, systems which define health care narrowly and tend to exclude longer term nursing and rehabilitative functions will also tend to be easier to cost limit than those based on a broader view of patients' needs.

Cash limited primary care?

Given that cash limits have already been shown to be enforceable in the hospital and community health services, there is no inherent reason why they could not be applied to family health. Indeed, the ratio of fixed to variable costs in family practice is often more favourable to the workings of a cash limit than it is in hospital based interventions. Because overall family health service costs will tend to remain roughly constant within a given range of activity they are largely predictable. The controllability of both the general medical and general pharmaceutical services during the past four decades bears witness to this fact. Certainly, unification of the relatively small family health "vote" with the larger one for hospital and community health would probably offer ways of creating sufficient leeway to meet likely variations in cost, given effective manpower controls and disciplined capital spending.

However, this should not be taken to imply that a comprehensively cash limited NHS is necessarily desirable from the viewpoint of those who wish to ensure adequate funding of primary care. Nor does it mean that there would not be problems or that the current fundholding model offers the best way of applying cash limits to primary care.

For instance, it could be argued that the strong tradition of primary care in Britain stems from funding arrangements and associated medical boundaries established well before the creation of the NHS. The relatively well controlled use of specialist services which has resulted may help account for the low overall cost of health care in Britain. Any overhasty move to break down the effective ringfencing of NHS primary care resources, particularly before purchasing agencies have developed a full understanding of the forces which may pull resources back from primary providers to secondary ones, could prove financially counterproductive. Family health could end up facing many of the uncertainties and the discontent currently affecting the "community care" sector.⁵

Therefore the most prudent next step could well be financially to integrate—within the existing family health service open vote—all community health service purchasing with provision based on mainly multi-disciplinary, multipartner practice based teams.⁶ Such an extension of the non-cash limited NHS safety valve would doubtless be strongly resisted by the Treasury. But it might help to ensure that overall NHS costs are restrained efficiently and humanely and also to promote balanced, flexible competition within primary and community health care. Present district management and NHS trust arrangements might actually restrict this. For example, NHS trusts with community health service functions linked to hospitals might in future choose to sell capital assets before services like community nursing have been more fully integrated with family practice. Thus despite the continuing lack of adequate premises for primary and allied health in many areas, notably London, the overall capital stock of the family health and com-

munity health services could be reduced. Investments, including those made by local authorities before 1974, would be sucked back into hospitals.

Imposition of rigid cash limits at practice level would create difficulties for smaller practices and also for all practices over provision of drugs. Individual practitioners or groups with small lists would be at greater risk of going over budget than practices with larger (risk spreading) lists, simply because of randomly occurring high levels of need.

This problem has already been raised in the context of fundholding.^{7,8} This scheme attempts not only to fund elements of general practitioners' work from the cash limited health and community vote (as in the case of fundholder prescribed medicines) but also to give primary care practitioners more direct power over resources destined for use in the secondary care sector. (Nevertheless, some two thirds of the total NHS money devoted to fundholders' patients is still channelled through health authorities: the approach is more cautious than is sometimes suggested.)

Fundholding is an exciting and in many respects laudable initiative, notwithstanding the issues of equity that it may raise. But it is not clear that it could be extended to include all practices or all NHS resources going to patients passing through the general practice gateway. Larger population bases will probably be needed to ensure that variations in spending can be kept within meaningful limits. Professionally, and from the viewpoint of public interest, it is not necessarily desirable that central government or regional health authorities should have the power to impose strict curbs on all primary health care outlays when informed demand levels imply greater spending.

Thus, at least during the 1990s, the least hazardous way to try to achieve the full advantages of a price aware, cost restrained NHS driven by primary care would be to extend the flexible indicative financial control approach pioneered in the drug budget in primary care. This could be combined with the establishment of firmer rights of access for the general practitioner and patient to hospital (or other community health) facilities. If costs are limited through a system of notional budgets for each practice population's hospital care combined with firmer purchasing budgets at district or regional levels, then further shifts in the balance of resource control in favour of general practitioner led service development might be achieved.

This is not to discount the existing fundholding approach. Rather, a pragmatic combination of experiments ought to be continued during any transition towards greater financial and operational integration of primary and secondary care in the NHS. As this takes place careful thought also needs to be given to how contingency resources can be held. These will be necessary to prevent cash limited budget holders faced with district or regional outlays that are over target

being forced to make "quick fix" adjustments to services or encouraged to turn certain elements of the NHS into Cinderella services which may be sacrificed in attempts to regulate costs. General practitioners and their patients are likely to find it unacceptable that services such as community nursing might be used in this way.

Conclusions

In the past the approach of the General Medical Services Committee towards issues of NHS financial management has on occasion been naive, and failure to take part in constructive debate has probably contributed to the introduction of control arrangements that may be more likely to impose cheapness than to ensure value for money. Family doctors and their representatives should make committed efforts to understanding the economic and managerial logic underlying the creation of "the new NHS." Likewise, those in government and NHS management must now make a similar investment in understanding professional concerns, and subsequent debate and compromise ought to be conducted in circumstances which genuinely permit free speech of participating individuals. In the past many seem to have felt confined to defending the assumed interests of their "side."

The publication of *Building Your Own Future* is an encouraging sign that such an idealistic set of objectives is attainable in Britain. The NHS is well placed to lead most other health care systems in ensuring value for money spent in the 1990s. But efficient use of available health funds is not the community's only requirement. The NHS also needs enough money to ensure that it can make an optimum contribution to the population's overall welfare. Perhaps as concerns about creating the mechanisms needed to create cost and price sensitivity within the health care system are resolved issues such as how to maintain (or further ensure) universal access to increasingly sophisticated and expensive forms of care and to provide genuinely adequate community health and social support for chronically ill people will begin to receive the attention they deserve.

1 General Medical Services Committee. *Building your own future: an agenda for general practice*. London: GMS, 1991.

2 Taylor DG. *Understanding the NHS in the 1980s*. London: Office of Health Economics, 1984.

3 Jonsson B. *Health care systems in transition—the search for efficiency*. Paris: Organisation for Economic Cooperation and Development, 1991:87-101.

4 Hurst JW. In: *Health care systems in transition—the search for efficiency*. Paris: Organisation for Economic Cooperation and Development, 1991:71-3.

5 Hudson B. A policy for care—or for chaos? *Health Service Journal* 1991 Jul 4: 30-1.

6 Taylor DG. *Developing primary care: opportunities for the 1990s*. London: King's Fund Institute, 1991.

7 Wiener JP, Ferriss DM. *GP budget holding in the UK: lessons from America*. London: King's Fund Institute, 1990.

8 Crump BJ, Cubbon JE, Drummond MF, Hawkes RA, Marchment MD. Fundholding in general practice and financial risk. *BMJ* 1991;302:1582-4.