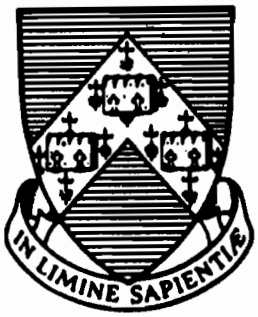


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# Assessing Efficiency in the New National Health Service

by Michael Drummond

DISCUSSION PAPER 75

University of York

Centre for Health Economics

# ASSESSING EFFICIENCY IN THE NEW NATIONAL HEALTH SERVICE

by

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September 1990

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## Acknowledgement

This paper will shortly be published in Changing Face of the NHS in the 1990s, edited by Peter Spurgeon for Longman and Co. We are grateful to the editor for permission to publish the paper in the Discussion Paper Series.

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**Abstract**

Increased efficiency is one of the major objectives of the reforms of the NHS. However, this begs the question of how efficiency will be assessed, since one cannot necessarily assume that the adoption of market principles will automatically lead to efficiency. This paper discusses the methods for assessing the efficiency of health care programmes and treatments, the ways in which the reforms are likely to encourage assessment of efficiency and the monitoring systems that should be put in place to assess that more efficient health care provision has been secured as a result of the reforms. It is concluded that while there has been relatively little formal assessment of the efficiency of alternative programmes and treatments to date, the reforms present new opportunities. Efficiency assessments could be used by purchasing authorities in deciding whether or not to place a contract and in deciding upon the contract specification. They could also help providers decide upon the most appropriate treatment technologies. In the primary care sector, efficiency assessments of drug therapy could assist in the monitoring of the indicative prescribing scheme.

## 1. INTRODUCTION

Increased efficiency is one of the major objectives of the White Paper 'Working for Patients' (DH, 1989a). The document proposes a number of efficiency promoting measures, including the establishment of an 'internal market' for health services with contracts between 'purchasers' and 'providers', a voluntary scheme for those general practices that wish to manage their own fund and an indicative prescribing scheme for all general practitioners.

Since the pursuit of increased efficiency is one of the major objectives of the proposals, this begs the question of how efficiency will be assessed. One cannot necessarily assume that the operation of market principles per se will automatically lead to efficiency. Indeed there is considerable evidence from the literature (Evans, 1985) that this is not the case, whether the patient is the direct consumer of services, or whether the doctor acts as an agent on the patient's behalf.

There has been relatively little formal assessment of the efficiency of alternative health care programmes or treatments in the United Kingdom (Ludbrook and Mooney, 1983; Drummond and Hutton, 1987). Authors point to a number of possible explanations including the lack of appropriate evaluative skills, the lack of available data and the lack of appropriate incentives. Indeed, the only formal requirement for economic evaluation of alternative plans or programmes at the current time is that of option appraisal for schemes where one of the options is a capital scheme with an initial outlay of £10 million or more (DHSS, 1981). In such cases the Regional Health Authority needs to submit a formal evaluation of the costs and benefits of options with its 'approval in principle' submission to the

Department of Health (Akehurst, 1989).

In addition, the Department of Health undertakes, or commissions, evaluations of health technologies at the national level (Buxton et al., 1985) and has issued guidance on the economic evaluation of medical equipment (DHSS, 1988). However, it has neither been thought desirable nor feasible to require formal evaluations of alternative programmes, treatments or technologies at the local level. Rather, the emphasis has been on reviewing health authority performance on a more aggregate level, through the development of performance indicators (DHSS, 1983), supported by the Review Process. There is no equivalent exhaustive review of family practitioner services, which are a major focus of the recent White Paper and the subject of an additional White Paper on primary health care (DH, 1989b).

This paper examines the prospects and problems of assessing the efficiency of health care alternatives in the light of changes in the NHS. In particular, it considers the following issues:

i. what methods are available for assessing the efficiency of health care programmes and treatments;

ii. in what ways are the White Paper proposals likely to encourage assessment of efficiency;

iii. what monitoring systems should be put in place to assess whether more efficient health care provision has been secured as a result of the White Paper?

## 2. METHODS FOR ASSESSING THE EFFICIENCY OF HEALTH CARE PROGRAMMES

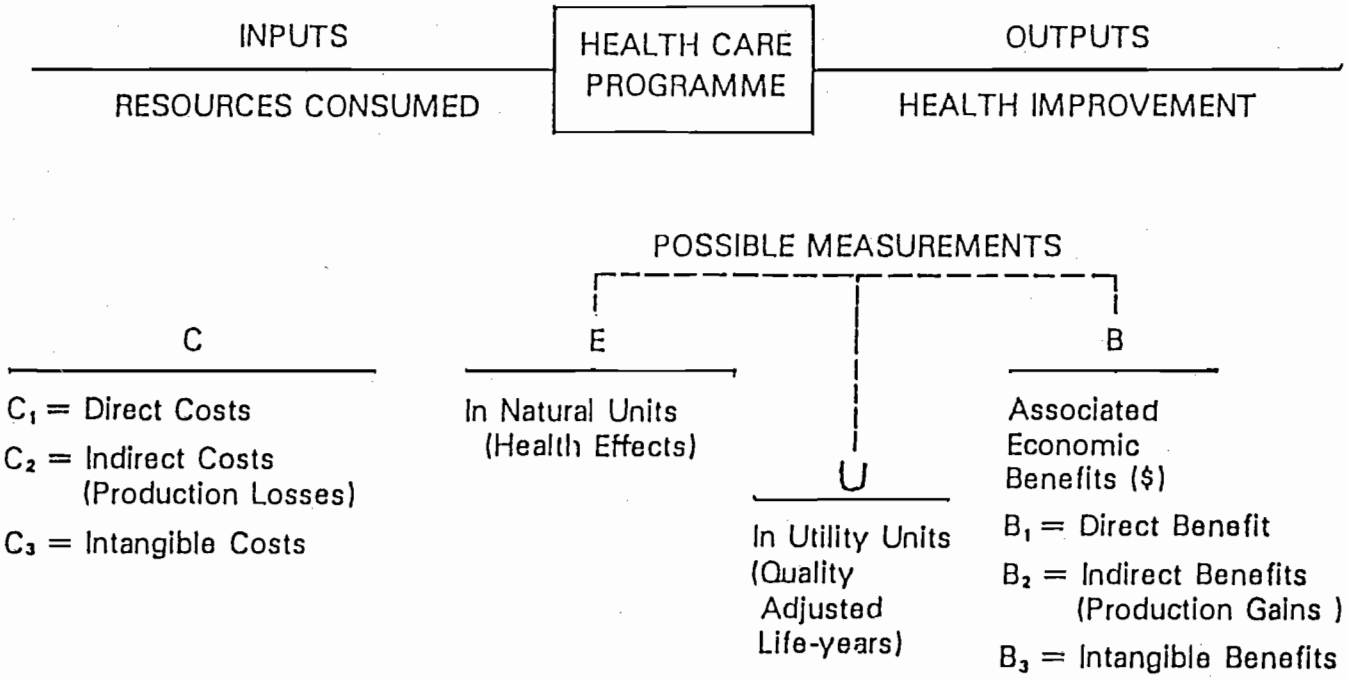
The methods of economic evaluation have been well documented elsewhere so will only briefly be described here (Drummond, 1980; Warner and Luce, 1982; Drummond et al., 1987). There are several related techniques, all having the common feature that some combination of the inputs (resources consumed) by health care programmes are compared with some combination of the outputs (improvements in health obtained).

The particular techniques differ mainly in the extent to which they measure and value improvements in health. Some techniques, such as cost analysis and cost minimization analysis, proceed on the basis that the alternatives under consideration have been shown to be equivalent in effectiveness. Others, such as cost-utility analysis and cost benefit analysis, measure health improvements in quality-adjusted life-years and money terms respectively. The most widely used technique is cost-effectiveness analysis, where the costs are measured in money terms and the improvements in health assessed in the most convenient natural units, such as 'years of life gained' or 'disability days avoided'. (The various forms of analysis are outlined in Figure 1.)

There are two features of economic evaluation that merit particular emphasis in the light of the White Paper proposals. First, assessment of efficiency explicitly requires consideration of both the resource use and the improvements in health obtained from the use of health care interventions. Therefore, improvements in efficiency need to be distinguished from cost cutting measures, where no consideration is given to the potential reduction in the effectiveness of the

FIGURE 1

# Components of Economic Evaluation



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programme when is reduced. Therefore, in the context of contracts fo the establishment of community drugs formularies, the lowest cost option is not necessarily the most efficient.

Secondly, assessment of efficiency implies a wide consideration of the costs of health care programmes. For example, the consideration of cost is not restricted to the hospital, but includes also the costs in primary care and those borne by patients and their families. In the past there has been a tendency in the NHS to shift costs from health authority to family practitioner committee budgets, through the earlier discharge of patients from hospital, or through restrictions in drug prescribing on hospital discharge. In addition, long waiting times for an outpatient attendance or for hospital admission also shift costs from secondary care to primary care. In the average district general hospital a significant proportion of medical admissions are emergencies.

A key aspect of the White Paper proposals is that health authority and family practitioner budgets will be more interrelated. At the level of the Regional Health Authority they will be combined. In addition, those general practices wishing to administer their own funds will have included in their budgets a component to cover certain hospital-based investigations and treatments. However, this will fall short of the health maintenance organisation (HMO) concept in the USA, where all the health care of enrollees is a charge on the HMO (Drummond and Maynard, 1988). Nevertheless, the White Paper proposals should, in principle, change the behaviour of key actors, such as general practitioners, in respect of the costs they consider relevant to their decisions.

## 3. IMPACT OF THE WHITE PAPER PROPOSALS ON THE ASSESSMENT OF EFFICIENCY

It was mentioned earlier that, with the exception of option appraisal, the application of economic evaluation methods is limited in the NHS to date. In 1987 Drummond and Hutton undertook a review of the economic appraisal of health technology. They found that 50 economic appraisals had been published, covering a wide range of topics. This is still minute in relation to the number of health technologies used in the NHS, however.

It is possible that Drummond and Hutton's review underestimates the total activity, since many appraisals may be undertaken within health authorities and such reports do not always enter into the public domain. This could be the case, but there is no evidence to suggest that the amount of 'in-house' appraisal is extensive. Indeed, in situations where health authorities have had access to the skills of economists, as through the York Health Economics Consortium (University of York, 1990), demand has been high, suggesting that the appropriate skills for the assessment of efficiency have been lacking in the past.

It is much more likely that the majority of assessments are currently undertaken either informally or indirectly. For example, the managers in most authorities trust their clinical staff to apply the most appropriate treatment technologies, either in their day-to-day practice, or in submitting bids for the development of clinical services. The extent to which this trust is misplaced is unknown. Managers mainly comfort themselves in the knowledge that physical and financial resources for clinical work are in short supply in the NHS. This is therefore likely to encourage clinicians to search for more cost-effective

procedures. However, it is known from the research into performance indicators that clinical teams with similar levels of resources produce different amounts of services (Yates and Davidge, 1984). Also it is conceivable that cash limits, whilst being effective in capping overall expenditure, may militate against the adoption of new, cost-effective, procedures if these necessitate financial outlays.

The discussion above has related mainly to the services under the management of health authorities. Even less is known about the assessment of efficiency in family practitioner services. General practitioners are largely free to employ the treatment technologies, mainly pharmaceuticals, that they see fit, with no overall budgetary limitation. Similarly, there are no restrictions on referrals to secondary care, although long waiting times act as a limitation in practice.

Given the current arrangements in primary and secondary care, it is hardly surprising that there has been so little assessment of efficiency to date. There is little or no formal requirement and few incentives. If the White Paper proposals are fully implemented, the incentives will change quite considerably. The next sections of the paper examine a number of the key proposals in relation to the impact they may have on the assessment of efficiency.

### 3.1 The internal market in health care

For the first time an element of competition will be injected into the provision of health care through the NHS. District Health Authorities, through their role as purchasers, will enter into contracts with a number of providers, including their own directly-managed units, to secure health services on behalf of their population. (In some localities a number of DHAs may join forces in a larger purchasing organization.) The extent of choice available to the DHA purchasers

will vary from one location to another, but is being broadened through the advent of self governing NHS trusts and the existence of a number of private hospitals.

The providers, be they directly NHS managed or self governing, will not be guaranteed a budget as at present. Rather they will attract funds as a direct result of the contracts placed. In addition to the contracts placed by health authorities, others will come from those general practitioners who opt to manage their own budget.

The precise extent to which competitive forces will come into play is as yet uncertain. One current concern of district general managers is the apparent paradox between, on the one hand, the need to secure good value for money in health care for the population served and, on the other hand, the need to ensure that one's own directly managed units do not fail (Crump et al., 1990). The view taken by the district on the relative importance of these two needs is likely to be a large influence on the competitive pressures faced by a given unit, as is the existence locally of other public or private providers and the number of GP budget holders.

However, although the extent of competition will vary from place to place, all providers need to begin thinking about their business plan. Namely, what markets are they seeking to serve and how are they going to serve them? Since the price at which services are marketed will also be a factor, one would expect that the business planning exercise will prompt an examination of the treatment technologies being employed and their relative cost-effectiveness. Some providers have already gone as far as to produce prospectuses outlining their services. Though these documents do not necessarily show evidence of cost-effectiveness thinking being employed in their production, they are the first sign that market

forces are having an impact.

## 3.2 Contracts for clinical services

The White Paper working paper on funding and contracts for hospital services envisages three broad classes of contract; block contracts, under which the GP or DHA would pay the hospital an annual fee in return to access to a defined range of services; cost and volume contracts, under which hospitals would receive a sum in respect of a baseline level of activity, defined in terms of a given number of treatments or cases, and cost per case contracts, where payment would be made to the hospital on a case by case basis, without any prior commitment of either party to the volume of case which might be so dealt with.

Although the precise management arrangements for each type of contract will differ, the contracting procedure will incorporate several key steps, many of which offer the opportunity for assessment of efficiency. In particular, someone, be they the DHA, a purchasing organization representing a group of authorities, or the individual GP, needs to decide whether contracts are to be let for particular services or not. Once this has been decided a contract specification needs to be written outlining the services to be provided, the treatment technologies to be used, the volume of cases to be treated, the standards to be achieved (in clinical effectiveness and quality of care) and price. Finally, a monitoring system needs to be put in place to ensure that the work specified in the contract has been undertaken to the required standard within the agreed financial amount. Any deviations from the terms and conditions of the contract would thus have to be justified. These decision points are discussed in turn below.

a. Deciding whether or not to place a contract

In reality the scope for choice here will depend on the nature of the clinical service concerned and the room for political manoeuvre. For example, the provision of emergency services locally may not be a matter of choice, although there are no doubt choices relating to the nature and extent of emergency cover, e.g. number of accident and emergency units in a given geographical area and the extent of 24 hours a day, 7 days a week cover. For certain types of elective operation there is likely to be much more scope for choice in whether or not to let contracts.

There is scope here for economic evaluation to inform priorities for health care. For example, Williams (1985) pointed out that coronary artery bypass grafting for severe angina with left main disease gave much better value for money (£1,040 per quality-adjusted life-year gained in 1983-84 prices) than CABG for mild angina with two vessel disease (£12,600 per QALY gained).

Under the current arrangements the priorities within open heart surgery are decided solely by the clinicians concerned. The DHA merely decides the level at which it is prepared to fund its surgical unit. One would expect that, all things being equal, clinical priorities would determine that the most serious cases are operated upon first, with broader and broader indications being accepted as funding becomes more widely available. However, this is not currently an explicit agreement between management and the clinical staff. Indeed, it is possible that some clinicians would treat cases which they find particularly interesting or challenging from a clinical viewpoint, rather than those which offer the most returns (in terms of health improvements) in relation to the cost. Many surgical waiting lists comprise large numbers of simple, low cost, procedures. For example,

an analysis of ophthalmology waiting lists has shown that the vast majority of patients are waiting for cataract extraction (Drummond and Yates, 1988). However, crude calculations of the cost per QALY gained from cataract extraction show this to be a high value for money procedure (Drummond, 1988). A similar situation exists in orthopaedics, where hip replacement has been demonstrated to give good value for money (Williams, op.cit.).

Under the new arrangements DHAs and GPs will be able to decide which clinical needs should be met first through their ability to place contracts. In that respect the White Paper represents a major shift in decision making about health care priorities. The extent to which DHAs and GPs will exercise their new power remains to be seen, although the waiting list initiative (IACC, 1989) demonstrates that the letting of contracts with units, or the threat of taking the funds elsewhere, has led to a change in behaviour of secondary care physicians.

However, one benefit for DHAs and GPs of the present system is that difficult rationing decisions are taken by hospital physicians and are seldom made explicit. In that respect physicians take on an additional burden beyond their immediate remit. It may be that DHAs in particular will find the explicitness that accompanies the placing of contracts difficult to contend with. It will now be their responsibility to explain to the public why some cases are priorities and others not. Economic evaluation and the calculation of comparative costs per quality-adjusted life-year gained is one way of providing such an explanation. It remains to be seen whether health authorities will take tough decisions and then seek to justify them, or whether they will seek ways to preserve the existing system, where rationing decisions are not made explicit. In practice, this would lead DHAs to opt more for block contracts, or cost and volume contracts with very flexible arrangements for overruns.

b. Deciding upon the contract specification

Under the current arrangements the hospital physicians largely decide on the method of treatment and (implicitly) the cost. It has been pointed out (Akehurst and Drummond, 1989) that while managers take some of the decisions controlling resource allocation, such as the nature of the 'hotel' facilities in hospitals, the major resource allocators are the doctors. They decide when to admit the patient, the nature of the diagnostic workup, the treatment technologies to be employed and when to discharge.

With the advent of contracts, a specification for the care to be provided will be drawn up. The level of detail in this specification is currently not clear, and there are at present very few examples of contracts (Drummond, Marchment and Crump, 1989; Central Birmingham Health Authority, 1989; Department of Health, 1990a). Drummond et al. (op.cit.) argue that it is important to specify contracts in considerable detail, including the client group to be served, the treatment methods to be applied, the standards of care to be achieved and the arrangements for monitoring.

Since a key feature of the contract will be the stated price, this gives an excellent opportunity for comparisons of options. For example, different treatment technologies may have different cost-effectiveness. Taking a simple case, there may be evidence that day-care or short-stay surgery is just as effective, but of lower cost than, traditional surgery (Russell et al., 1977; Waller et al., 1978). Therefore, providers ought to be able to agree to contracts for these services at a lower price. Costs may also vary with volume. Although this has been relatively under-explored by economists (Labelle, 1987), presumably those providers

concentrating on certain clinical services may be able to agree large contracts at a lower implied unit price. An example of this would be the concerted efforts to clear the cataract backlog (Thomas et al., 1989).

Finally, there may be occasions where there is an explicit tradeoff between higher costs and higher quality. This may be in terms of amenities in hospital wards, or in the actual clinical care provided. For example, some surgical implants may have a greater durability or offer greater freedom of movement to the patient than others. In cataract surgery a posterior chamber intraocular lens offers a greater quality of eyesight than aphakic spectacles (Davies et al., 1986). Here, the contracting process should allow the purchaser to make explicit decisions about the level of quality required. In essence, this requires assessment of whether the extra benefits exceed the higher costs. Providers may decide to offer a range of options at differing price.

Economic evaluation, with its explicit assessment of costs and health improvement, is again well placed to offer essential data to inform these choices. In the past they have been made implicitly by the providers, although general practitioners may have adjusted their referral patterns based on knowledge about their patients' preferences and clinical practice in given hospitals. Such 'consumer choice' exercised through the GP, has probably been most prominent in the field of maternity care to date.

One concern is whether competition in health care will drive out quality. The evidence on this, mainly from the USA, is mixed (Drummond, 1990). However, if economic evaluation were used more frequently in choosing between treatment technologies such 'trade-offs' between cost and quality would be made more explicit. Also, economic evaluation would ensure that an appropriate range of costs

is considered when cost comparisons are being made.

c. Deciding upon contract monitoring arrangements

Although an important feature of the contracting procedure, this is one area where economic evaluation currently has little to offer. Most evaluations of health technologies are performed ex ante and there are few examples of situations where researchers have investigated whether the preferred option, as indicated by their study, has performed well in practice.

However, it is clear that the monitoring of contracts is not a costless exercise and it is known from more aggregate economic studies that the administrative costs of health care systems embodying a significant market element are much higher than those of the NHS (Maxwell, 1985). Therefore, there is a role for the economic evaluation of alternative monitoring arrangements; namely, does the increased cost of more comprehensive monitoring generate benefits in the closer adherence to contract specifications?

## 3.3 Practice funds for general medical practitioners

Under the terms of the White Paper practices serving at least 11,000 patients will be able to manage their own fund. (Under certain circumstances the DH have indicated that this limit could be dropped to 9,000.) The fund will cover various hospital services, including elective surgical inpatient and day case treatment procedures, outpatient services, diagnostic investigation of patients and specimens, practice services and prescribing (DH, 1989c).

In general concept the practice funding scheme is similar to that of the health maintenance organization (HMO) in the United States. Whilst not nearly as extensive, it embodies several of the same incentives, such as to improve the range and quality of one's own services in order to attract more patients and to review carefully the appropriateness of utilizing certain hospital services. Whereas the White Paper working paper dealing with this topic points out that 'the scheme will be structured to ensure that GPs have no financial incentives to refuse to treat any category of patients', it is well known that in the USA HMOs reduced the number of hospital admissions dramatically. They also made much greater use of other health care professionals, such as nurse practitioners (Drummond and Maynard, 1988). Whether or not these changes, whilst reducing costs, also brought about a reduction in the quality of care is open to debate (Ware et al., 1986).

Much of what was said above about contracts for clinical services also applies to GPs managing their own funds. They will have an interest in knowing that the treatment technologies used in the secondary care sector are the most cost-effective available. Additionally, GPs will be able to consider whether it is more cost-effective to refer patients to the hospital at all, or to handle the care themselves. An obvious issue would be the substitution of careful management by the GP through ambulatory care, rather than requesting hospital admission. Also, some GPs already undertake minor elective surgery. Perhaps this will increase if it can be shown, in a cost minimization analysis, to be equally effective but of lower cost.

Another major item of GP care is pharmaceutical consumption. This component of the practice budget allocated by Regions will be in accordance with the principles outlined for indicative budgets (discussed below). However, it may

have extra meaning for GPs operating the practice budget scheme if increased expenditure on drugs means that other items of expenditure, such as elective admission to hospital, are reduced.

For example, it has recently been shown that a new drug (misoprostol), if used prophylactically, can reduce the incidence of non-steroidal anti-inflammatory drug (NSAID) associated ulcers in those patients taking these drugs for their arthritis (Graham et al., 1988). Should the GP prescribe the additional drug? This question can be answered in part by an economic evaluation of the prophylactic use of misoprostol (Knill-Jones et al., 1990). Similarly, prescribing long-term medication for elevated blood pressure or serum cholesterol will reduce the number of fatal and non-fatal coronary heart disease events. An economic evaluation could investigate the costs and benefits of such actions (Drummond and McGuire, 1990).

### 3.4 Indicative prescribing budgets for general medical practitioners

The working paper dealing with this topic argues that 'it is generally recognized that some prescribing is wasteful or unnecessarily expensive. The objective of the new arrangements is to place downward pressure on expenditure on drugs in order to limit this waste and to release resources for other parts of the Health Service'.

Despite this forthright tone, later parts of the document point out that 'the scheme will be structured in a way that patients will always get the drugs they need' and that 'it will ensure that budgets reflect the costs of patients needing a greater volume of drugs or more expensive drugs ....' 'so that there will be no disincentive to practices to accept such patients or to begin to prescribe expensive medicine to such patients, if there is a clinical need to do so'.

The development of the indicative prescribing scheme needs to be considered alongside two other initiatives; the feedback of information on prescribing behaviour to GPs through PACT (prescribing analyses and cost) and the development of community formularies. Therefore, whereas prescribing budgets will inevitably be set in the aggregate, taking into account local social and epidemiological factors, both PACT and formularies are much more likely to lead the GP to consider why a particular drug, and not an alternative including no drug, should be given in a particular instance.

Both PACT and formularies will give information to GPs on drug costs. This is to be welcomed. However, Drummond (1989) has pointed out that there are dangers in drawing up formularies in a too simplistic way, merely considering the comparative costs of the drugs themselves.

First, it is possible that a too narrow definition of comparative costs would be used. This should not only consider the costs of the drugs but the other medical care that is required. For example, a slightly cheaper drug may require a more expensive route of administration, require more frequent patient monitoring, or lead to more side effects.

Secondly, it is possible that costs in the longer term may be ignored. This is particularly true of drugs that are used prophylactically, such as lipid lowering agents. These may require additional costs now, but the costs of coronary heart disease occurring in the future may be reduced. (Although in an economic evaluation costs occurring in the future have less weight, since they are discounted to present values. See Drummond (1980) for more discussion.)

Thirdly, it is possible that differences in the effectiveness of drugs will be ignored in the quest for cost-cutting. It was mentioned earlier that one must distinguish between economic efficiency and cost-cutting. Therefore, it is conceivable that a higher cost drug would be worthwhile, compared to the alternative, if it had much higher effectiveness. Nevertheless, some branded products may offer only marginal advantages over much cheaper generics.

It can be seen, therefore, that the choice of drug is not a simple matter. Certainly, greater efficiency would not be achieved by the use of the cheapest available product in each case. Thus, there is a clear role for economic evaluation in investigating the relative cost-effectiveness of prescribing options (DH, 1990b). Some studies have already been undertaken (Drummond, Teeling Smith and Wells, 1988) and others are in progress. It is unrealistic to expect GPs to fund such studies, although some have been undertaken by central government (Anderson, 1989). It is much more likely that the pharmaceutical industry will support such analysis as it perceives its interests as being threatened (Drummond, 1989/90).

## 4. DISCUSSION: WHAT MONITORING ARRANGEMENTS ARE REQUIRED TO ENSURE EFFICIENCY?

One of the main objectives of the White Paper proposals is to increase the efficiency of the NHS. Many of the right kinds of incentives will be put in place, but will decision makers respond by carefully considering their options within an economic evaluation framework, or will they respond in a more ad hoc manner? That is, it may be easier to agree a price for a contract for clinical services than to assess cost or cost-effectiveness. This final section outlines the monitoring arrangements that will be required to ensure that important efficiency issues are being considered carefully by DHAs and FPCs. They could quite easily form part

of the agenda for the annual review of these institutions in their new roles.

First, analysis should be carried out of how health authorities decide which contracts to place. Will this be based on historical precedent, or will a real effort be made to consider which investments in health care will give the best value for money? What, if any, analysis will support such decision making processes.

Secondly, contract specifications (and successful contracts) should be scrutinized in order to assess how carefully the purchaser has specified the requirements and whether there is any evidence that, through the contracting process, cost-effective medical technologies are being encouraged. For example, is day-case surgery specified where this would be appropriate, or is the choice of treatment technology left to the provider?

Thirdly, the processes by which HAs review contracts should be assessed. In particular, what attitudes do HAs take to contract deviations in respect of the cost, volume and quality of care?

Fourthly, the approaches used by FPCs to promote cost-effective prescribing should be monitored. For example, in stimulating the development of community formularies, or in setting indicative budgets, do they take a broad view of cost (beyond the price of the medicines themselves) and do they consider the relative effectiveness of medicines?

Fifthly, the efforts made by FPCs to promote cost-effective behaviour by those GPs opting to manage their own budgets should be monitored. For example, do they support GPs wishing to develop cost-effective alternatives to hospital admission and do they help GPs find the best value for money alternatives in

placing contracts with hospitals for non-emergency admissions.

Clearly, the proposals in the White Paper represent the most fundamental change in the NHS since its inception. Others have highlighted the need for monitoring the changes brought about by the proposals (Judge, 1989). Since one of the major objectives of the White Paper is to increase the efficiency of the NHS it is important that health care objectives are evaluated from an economic viewpoint and that monitoring arrangements are put in place to ensure that HAs and FPCs rise to the challenge. This paper has outlined the ways of assessing efficiency, the ways in which the White Paper proposals present new opportunities and the monitoring arrangements to ensure that HAs and FPCs seize them.

## REFERENCES


Akehurst, R.L. (1989) What clinicians can contribute to 'option appraisal'. In R.L. Akehurst and M.F. Drummond (eds.) Clinicians as the managers of health care resources. Bristol, National Health Service Training Authority.

Akehurst, R.L. and Drummond, M.F. (1989) Clinicians as managers of health care resources. Bristol, National Health Service Training Authority.

Anderson, R.L. (1989) Economics of cholesterol measurement. Presentation given at the Kings Fund Consensus Conference on the Measurement of Cholesterol. London, June 26-28, 1989.

Buxton, M.J. et al. (1985) Costs and benefits of the heart transplant programme at Harefield and Papworth Hospitals, London, HMSO.

Central Birmingham Health Authority (1989) Annual report of the Department of Public Health. Birmingham, CBHA.

Crump, B., Drummond, M.F. and Marchment, M. (1990) The DGM's dilemma. Health Service Journal; 12 April: 552-553.

Davies, L.M., Drummond, M.E., Woodward, E.G. and Buckley, R.J. (1986) A cost-effectiveness comparison of the intraocular lens and contact lens in aphakia, Transactions of the Ophthalmological Society of the United Kingdom; 105, Part 3, 304-313.

Department of Health (1989a) Working for Patients. London, DH.

Department of Health (1989b) Primary health care services. London, DH.

Department of Health (1989c) Funding general practice. London, DH, December 1989.

Department of Health (1990a) Operating contracts. London, DH.

Department of Health (1990b) Improving prescribing. London, DH.

Department of Health and Social Security (1981) Health Services Management. Health building projects. HN (81) 30. London, DHSS.

Department of Health and Social Security (1983) Performance indicators for the NHS. London, DHSS.

Department of Health and Social Security (1988) Option appraisal of medical and scientific equipment. London, HMSO.

Drummond, M.F. (1980) Principles of economic appraisal in health care. Oxford, Oxford Medical Publications.

Drummond, M.F. (1988) Economic aspects of cataract. Ophthalmology; 95(8): 1147-1153.

Drummond, M.F. (1989) The economics of drug formularies. Pharmaceutical Journal; April 15: 451-2.

Drummond, M.F. (1989/90) The role of economic evaluation in the pricing of modern pharmaceutical products. Pharmaceutical Times; December; January; February; March.

Drummond, M.F. (1990) Will competition drive out quality? In Quality and Contracts, Hereford, National Association for Quality Assurance in Health Care.

Drummond, M.F. and Hutton, J. (1987) Economic appraisal of health technology in the United Kingdom. In M.F. Drummond (ed.) Economic appraisal of health technology in the European Community. Oxford, Oxford University Press.

Drummond, M.F., Stoddart, G.L. and Torrance, G.W. (1987) Methods for the economic evaluation of health care programmes. Oxford, Oxford University Press.

Drummond, M.F. and Maynard, A.K. (1988) Efficiency in the NHS: lessons from abroad. Health Policy; 9: 83-96.

Drummond, M.F., Teeling Smith, G. and Wells, N. (1988) Economic evaluation in the development of medicines. London, Office of Health Economics.

Drummond, M.F. and Yates, J.M. (1988) Clearing the cataract backlog in a not-so-developing country. Report for the National Eye Institute, Bethesda, MD.

Drummond, M.F., Marchment, M. and Crump, B. (1989) Taking the bit between your teeth. Health Service Journal; September 14: 1126-1128.

Drummond, M.F. and McGuire, A. (1990) The economics of lipid-lowering drugs. In B. Lewis et al. (eds) The social and economic contexts of coronary heart disease prevention. London, Current Medical Literature.

Evans, R.G. (1985) Strained mercy; the economics of the Canadian health care system. New York, Butterworths.

Graham, D.Y., Agrawal, N.W. and Roth, S.H. (1988) Prevention of NSAID - induced gastric ulcer with misoprostol: multicentre, double-blind placebo-controlled trial. Lancet; 11: 1277-80.

Inter-authority Comparisons and Consultancy (IACC) (1989) Examining some of England's longest waiting lists: half year report. Birmingham, IACC, Health Services Management Centre.

Judge, K. (1989) Monitoring and Evaluating Working for Patients. British Medical Journal; 299: 1385-1387.

Knill-Jones, R., Drummond, M.F., Kohli, H. and Davies, L.M. (1990) Economic evaluation of gastric ulcer prophylaxis in patients receiving non-steroidal anti-inflammatory drugs. Postgraduate Medical Journal; 66: 639-646.

Labelle, R.J. (1987) Planning for the provision and utilization of new health care technologies. In D. Feeny, G. Guyatt and P. Tugwell (eds.) Health care technology: effectiveness, efficiency and public policy. Halifax (N.S.), Institute for Research on Public Policy.

Ludbrook, A. and Mooney, G.H. (1983) Economic appraisal in the NHS. Aberdeen, Northern Health Economics.

Maxwell, R. (1985) Health and wealth. Lexington Brook. Lexington, DC Heath & Co.

Russell, I.T., Devlin, H.B., Fell, M. et al. (1977) Day-care surgery for hernias and haemorrhoids: a clinical, social and economic evaluation. Lancet; i: 844-7.

Thomas, H.F., Darvell, R.H.J., Hicks, C. (1989) 'Operation cataract': a means of reducing waiting lists for cataract operations. British Medical Journal; 299: 961-963.

University of York (1990) Health economics at York. York, 1990.

Waller, J. et al. (1978) Early discharge from hospital for patients with hernia or varicose veins. London, HMSO.

Ware, J. et al. (1986) Comparison of health outcomes of a health maintenance organization with those of fee-for-service. Lancet; i: 1017-1022.

Warner, K.E. and Luce, B.R. (1982) Cost-benefit and cost-effectiveness analysis in health care. Ann Arbor (M.I.), Health administration Press.

Williams, A.H. (1985) Economics of coronary artery bypass grafting. British Medical Journal; 291: 326-329.

Yates, J.M. and Davidge, M. (1984) Can you measure performance? British Medical Journal; 288: 77-83.

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