

GP Budget Holding in the UK: *Lessons from America*

Jonathan P. Weiner
with
David M. Ferriss

HMP:IA (Wei)

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ISBN 1 870607 17 1

Published by the King's Fund Institute
126 Albert Street, London NW1 7NF.
Telephone 01-485 9589

Design & print by Intertype

No 7 in a series of research
reports on current health
policy issues

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Acknowledgments

This paper was supported in part by a grant from the King's Fund Institute. The opinions expressed herein are those of the authors and not necessarily the funding organisation.

Many persons in the UK provided time and materials to the authors, their assistance is gratefully acknowledged, as were comments and criticisms they provided on earlier drafts. Ken Judge, Director of the King's Fund Institute, was instrumental to this endeavour.

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Summary

A key component of the 1989 White Paper, *Working for Patients*, is the so-called budget holding plan for general practitioners. This scheme, has become the subject of intense scrutiny and criticism. Budget holding calls for the development of an administrative infrastructure, where large GP group practices are fiscally responsible for most services delivered to patients on their list; including, some care provided by consultants, hospitals and pharmacies. In the UK, nothing like this arrangement has been tried before.

The budget holding scheme is uniquely British. However, educated observers have noted that many components of the plan were crafted with an eye directed across the Atlantic. Most aspects of the scheme, now only contemplated in the UK, have functioned for years in American health maintenance organisations (HMOs).

The thesis of this paper is that an analysis of the GP budget holding proposal, in the light of the experience of US HMOs will provide valuable insight into how the British innovation might (or might not) function. Moreover, we believe the decades of US experience have a high degree of relevance for the design, implementation and management of budget holding practices in the NHS of the 1990s.

We support the basic principles embodied in the budget holding proposal and believe it will help lead to four *desirable outcomes*:

- 1 Increased integration between the primary and secondary care sectors, which should improve aspects of quality of care and offer intrinsic incentives to improve efficiency;
- 2 Increased sensitivity to consumer needs;
- 3 It will offer a fertile incubator for NHS innovation; and
- 4 It will allow for a significant private-sector role, while helping to ensure overall coordination and social equity.

There are however a series of *challenges* facing the budget holding scheme as it is presently outlined in the Government's Working Paper. Seven key problem areas are identified following:

- 1 The proposed financial risk structure could potentially introduce doctors to several undesirable incentives;
- 2 Existing practice management systems will not be able to support this complex practice arrangement.
- 3 An 11,000 patient practice as the main organisational unit poses several problems: a) a larger base might be required to develop sophisticated administrative systems; b) the risk-pool may be unstable; and c) too many consumers will be excluded from the scheme.
- 4 Present hospital pricing mechanisms are not adequate to support GP contracting.

- 5 Inadequate quality controls are built into the scheme.
- 6 There are inherent incentives for GPs to seek a select-clientele for their practice.
- 7 No rationale demonstration and evaluation phase exists.

The following *recommendations* should be considered before the budget holding plan is widely implemented:

- 1 Financial risk arrangements should be restructured in order to minimise perverse incentives and maximise those that are desirable. Specific proposals are presented in the text.
- 2 A networking arrangement should be developed where multiple budget holding practices can be expertly managed under a single umbrella organisation. This would also provide a wider base for the financial risk-pool.
- 3 A major development and technical assistance effort is needed to improve the management systems available to budget holders.
- 4 Development and technical assistance is needed to provide hospitals the tools for use in pricing and contracting their services.
- 5 Mechanisms must be developed to monitor the quality of the care provided by budget holders and participating consultants.
- 6 A case-mix adjustment methodology for calculating budgets should be developed. This formula could include such factors as age, sex, health status, private insurance coverage, and social class.
- 7 Special demonstrations should be developed to explore approaches for integrating budget holding practices and community care. For example, some GPs might hold the budgets for long-term care and other primary care providers.
- 8 A rational pilot-demonstration and evaluation phases must be designed. It may be wise to experiment with several alternative budget-holding models simultaneously. The evaluation should also include an assessment of budget holding's effects on those not enrolled in such practices.

Based on the US HMO experience and our understanding of the British health care milieu, we are most definite in our belief that the organisational and financial concepts introduced in the budget holding proposal will offer advantages over the existing system. This conviction led us to write this critique. In so doing, we hope that the GP budget holding scheme will be just a bit more likely to succeed. The NHS is at a critical crossroads. With sensitivity to the Service's past and without losing sight of its visions, we believe that the budget holding proposal represents an opportunity for a creative positive change.

US acronyms used in the text*

AMA	American Medical Association
COPC	Community Oriented Primary Care
DRG	Diagnosis Related Group
FFS	Fee-for-Service (i.e., item-of-service)
HCFA	(US) Health Care Financing Administration
HMO	Health Maintenance Organisation
IBNR	Incurred But Not Reported (Costs)
IRF	Institutional/Referral Fund
IPA	Independent Practice Association
MIS	Management Information System
PPGP	Prepaid Group Practice
PPO	Preferred Provider Organisation
PRO	Peer Review Organisation
QA	Quality Assurance
S/HMO	Social/HMO
UR	Utilisation Review

* Also see *A glossary of terms* (Appendix 1)

Introduction

The 1989 National Health Service White Paper, *Working for Patients*, has put forward a controversial blueprint for change. The restructuring of the National Health Service it proposed is quite profound. A key component of the White Paper, dubbed the general practitioner (GP) budget holding scheme, has become the subject of intense scrutiny and criticism.

Budget holding calls for the development of an administrative infrastructure, with large GP group practices for the first time fiscally responsible for some services delivered to their patients by consultants, hospitals and pharmacies. In the UK, nothing like this arrangement has been tried before.

The stated goals of the Practice Budget for General Medical Practitioners plan are:

- 1 To improve the quality of services on offer to patients by GPs;
- 2 To stimulate hospitals to be more responsive to the needs of GPs and their patients;
- 3 To help GPs develop their practices for the benefit of their patients; and
- 4 To enable GPs to play a more important role in the way NHS money is used to provide services to their patients. (Working Paper 3, 1989)

Like the rest of the White Paper, the budget holding agenda is uniquely British; however, educated observers have noted that many components of the plan were crafted (others might say concocted) with an eye directed across the Atlantic. Most aspects of the scheme, now only contemplated in the UK, are fully operative in the United States. For example, linkage of the clinical and insurance functions, and the role of GPs as fiscal, as well as clinical, gatekeepers, are the hallmarks of the more than 600 health maintenance organisations (HMOs) that dot the North American continent.

The thesis of this paper is that an analysis of the GP budget holding proposal, in the light of the US HMO movement and the managed care industry it has spawned, will provide valuable insight into how the British innovation might function, or not. Moreover, we believe the decades of US experience have a high degree of relevance for the design, implementation and management of budget-holding practices in the NHS of the 1990s.

Over recent years, the NHS debate has been peppered by an array of proposals from advocates of one form of HMO-like organisation or another (Maynard et al 1986; Bosanquet 1986; Goldsmith and Willetts 1988; Butler and Pirrie 1988; Bevan 1988). The authors have put forth their concept papers, in part as vehicles for instilling internal markets. Adding to the mix-of-ideas, American analysts have recommended HMOs as worthy of consideration as export commodities (Enthoven 1985; Havinghurst et. al; 1988, Weiner 1987).

Our paper does not seek to revisit the antecedent debate. Such discourse — especially by outsiders — would not be productive. Rather, the point of departure for our analysis is the White Paper, *Working for Patients*. Therefore, our general premise — and supporting evidence — is that budget holding, or something like it, can on balance be expected to lead to desirable effects.

On the other hand, we will not shy away from criticising those aspects of the proposals we believe to be flawed. Where feasible and apparent, we will suggest modifications.

Although not uninformed as to its scope and content, we admittedly are detached from the heated debate now surrounding the Health Minister's proposals. This distance can be viewed positively. Unlike most other critics, the implementation of the White Paper will have no direct consequences for us, or for our professions and institution.

Our sources of bias are a bit different. At times, subtle intricacies of the NHS undoubtedly escape us, but we have attempted to compensate for this by seeking counsel from those more intimate with the nuances of British health care. Second, we acknowledge that we are proponents of market-oriented primary care-based delivery systems. We have observed and assisted such organisations achieve their missions ... often admirably. However, this veneration is tempered by the fact that we have also witnessed such organisations fail ... sometimes miserably.

This paper examines budget holding and managed care in three main sections: Financial structures and organisational arrangements; Management and control; and Quality of care and equity. A final section draws together a summary and presents our recommendations.



Budget holding

Finance and organisation

The British plan and the US experience

While there is hardly consensus that the White Paper offers the solutions, there is fair agreement that selected attributes of the NHS must be sustained and others eliminated. Controversy surrounds the degree to which continuity and change should be balanced, and how this equilibrium should be reached. To the extent that budget holding may represent one such change, we hope to contribute to the debate by bringing to bear the US experience.

The budget holding basics

The White Paper proposes that GP practices with lists of at least 11,000 persons will be given the opportunity to manage the budget for a wide range of designated services. The proposal indicates that out of a fixed annual budget remitted to the general practitioner, the following expenditures must be covered:

- All practice staff and facility costs now directly reimbursable under the standard (non-budget holding) GP contract;
- All outpatient services provided by hospital-based consultants and auxiliary staff;
- All hospital and consultant services associated with elective inpatient or day treatment surgery;
- All diagnostic investigations (e.g. laboratory, radiology, x-ray, imaging, ECG) ordered or performed by the GP or in-scope consultant;
- All drugs dispensed by the GP or obtained by the patient on prescription from any chemist; and
- Any expenses associated with management and other costs associated with participation in the budget holding scheme itself.

A series of services are specifically excluded from the budget and will be borne by the hospital and/or parent District Health Authority (DHA). These include: hospital and consultant costs associated with medical or non-elective surgery; services provided by an Accident and Emergency (A&E) department; and (potentially) certain prevention and screening tests. The proposal also calls for a stop-loss provision that would limit the practice's budget responsibility to £5,000 of hospital treatment expenses per person per year. Moreover, the Regional Health Authority (RHA) will rescue a practice if it spends between 100 per cent and 105 per cent of its allotted budget; however, if this occurs, a corresponding reduction will be made in the following year's payment. The proposal is silent regarding expenditures in excess of 105 per cent of a budget, although such a circumstance will lead to a 'thorough audit'. Moreover, if overspending is 'due to the changed circumstances of the

practice', the group may call for a review of the fairness of the allocation.

A participating practice will be completely free to shift expenditures (within a year) between individual budgetary components. Moreover, the government intends that practitioners should spend any accrued savings 'on improving their practices as they judge best and offering more and better services to their patients.'

Local Family Practitioner Committees (FPCs) will be responsible for the budget-holding GP's contracts; however, allocations for GP practice budgets will come directly from the Regional Health Authorities.

Services now provided by the community health side of the Hospital and Community Health Service are excluded from the budget, and, as would be expected, are services provided by municipalities.

Initially, budgets for a given practice will be determined on a case-by-case basis in the light of 'different expenditure components contributing to the total budget'. However, it is the government's intent to move towards a universal weighted capitation formula which reflects the actual need of a given population of patients.

Each budget holding GP practice will negotiate its own contracts for covered services with NHS-managed hospitals, self-governing-trust hospitals (i.e. those NHS hospitals that have opted out), and/or private hospitals. The proposal intimates that for basic services, a practice will selectively negotiate fixed-cost block contracts with facilities, in a manner similar to those proposed for DHAs in the working paper on hospital contracts. (Working Paper-2 1989) That document also allows for cost and volume or case-by-case contracts, where payment is linked to specific service delivery. For in-budget services, GPs must direct patients only to facilities with which they have contracts. Although not addressed, it is assumed that those services not covered by the budget, or those falling above the stop-loss, would be handled as if the patient were not part of a budget holding practice. It is intended that GPs select their hospital(s) on the basis of cost-effectiveness, patient amenities (including location) and quality of care.

The basic financial structure of the proposed GP budget holding scheme is summarised in diagram form as Figure 1 (opposite).

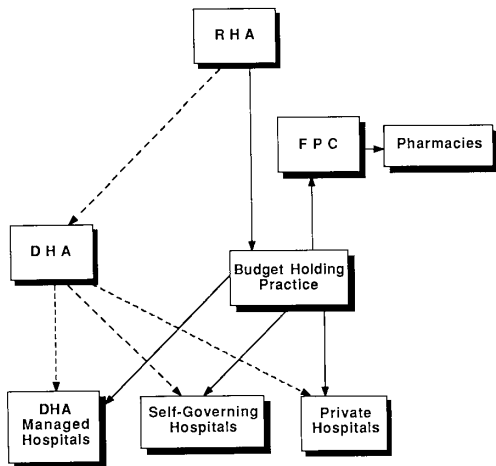
Risk sharing

Perhaps the most controversial feature of the budget holding proposal is that it assigns doctors a degree of both financial risk and responsibility never before experienced in the UK. Critics and supporters alike cite this point, as respectively the key weakness or strength of the proposal.

Detractors say the potential to lose or gain financially (even within stated bounds) will subvert the GP's role as the patient's advocate through a series of

Fig. 1 Financial arrangements under proposed budget holding scheme

Broken lines reflect 'out-of- budget' services only



perverse incentives. One group has termed this 'distort(ions) by commercial considerations' (Bevan et al 1989). Critics argue that the doctor's and practice's financial interests run counter to the patient's. Each additional prescription, laboratory investigation, or referral to a consultant could be viewed by the GP as lost revenue. The practice would feel this loss directly for services they purchase on a service reimbursable basis (e.g. drugs, hospital care provided under a per case contract). The loss would be more indirect for services reimbursed under a fixed-contract basis (e.g. laboratory investigations or hospital services provided under a block contract). The incentives under the latter type of arrangement are quite complex and would also depend on controls or penalties written into the contract. Some have even suggested that where a GP has negotiated contracts with providers on both a block and per-case basis, he/she will send expensive cases to the first provider and less expensive cases to the second. In any event, a disincentive operating throughout is that resources spent securing outside services could, in theory, be used to improve the practice's services and the amenities available to patients and staff.

While the Government's proposal proscribes the use of excess revenue to increase the GP's income above that allowed by the standard GP contract, many critics believe that indirect rewards, such as new practice vehicles, educational travel, and interior decorating, may be feasible. Some have cynically suggested that successful budget-holders may put new revenues into their Land Rover or Cote d'Azur-Conference funds.

In addition to the concern over skimping, (i.e. putting cost considerations above patients' interests), GPs might be tempted to subtly (or not so subtly) game

the system for their financial advantage. For example, rather than directing a patient towards a surgical intervention (e.g. by referring the patient to a surgeon), which would be paid for out of the practice's budget, the GP might direct the patient towards a medical option which would be excluded from the budget. Another more onerous example of such gaming might be deferral of attention until an elective problem becomes an emergency, resulting in an expense that would not be debited to the GP's account.

Another concern relates to GPs selectively choosing or eliminating patients from their list. The government states that 'the scheme will be structured to ensure that GPs have no financial incentives to refuse to treat any categories of patients or accept them on their lists'. However, critics still argue that as the proposal stands, sick patients would become financially undesirable and represent (money) losers.

Supporters of budget holding believe that a key strength of the arrangement is that it helps create an internal market where GPs will act as prudent buyers of services on their patients' behalf. Not only will GPs have incentives to strike a good financial deal with hospitals but they will also find it advantageous to offer a package of services that will attract as many patients as possible to their list. In addition to making GPs more sensitive to consumers, supporters believe that the proposal will help induce down-stream suppliers (i.e. hospitals and consultants) to increase their efficiency and sensitivity to non-monetary amenities. For example, hospitals might entice GPs to contract with their facility by guaranteeing a limited queue for elective surgery.

On a related theme, and consistent with proposals made elsewhere in the White Paper, supporters believe that budget-holding will help private hospitals and self-governing trusts compete with NHS managed facilities. It is believed that this will force all parties involved to become more sensitive to traditional market factors and this behaviour will have wide-scale positive implications for all patients, including those outside of budget holding practices (i.e. in economic terms it will provide positive externalities).

From these arguments, it is interesting to note that budget holding, which focuses on restructuring the primary care sector, is viewed, at least in part, as a lever for improving care in the hospital sector.

Another advantage of budget holding, its supporters suggest, is that by empowering the practitioner who knows the patient best, economic decisions will reflect a high degree of concern for the consumer's medical and personal situation. They might add, is not the family doctor better able to disburse resources on a person's behalf, rather than some distant government manager or committee appointee? Moreover, are not doctors better positioned than lay consumers to make the purchasing decisions for high-technology services?

Supporters of general practice also believe that the financial empowerment the proposal would give to GPs could, for the first time, place primary care on an equal or better footing with the secondary sector. Under budget holding, GPs will not have to fight consultants and hospital administrators for limited resources. In theory GPs will be the ones to determine where a large proportion of resources are targeted.

HMOs and managed care

It is useful at this point to step back from the immediate debate around the White Paper's GP budget holding proposal. The following section provides a brief overview of the US experience with Health Maintenance Organisations and the dynamic managed health care industry.

What many do not appreciate is that individual American HMOs represent variations on a theme, rather than a single nationwide model. A simple characterisation of HMOs is further complicated by their role as prototypes for a large assortment of similar, yet distinct, organisations. These other entities are frequently confused with HMOs. When taken together, HMOs and their progeny, are now the modal form of health care delivery in the US.

This phenomenon has been termed the managed care movement, because HMOs and other new health plans (as we term any health insurance programme) *manage* health care resources. This is accomplished by one or more of the following approaches:

- a hierarchical vertically integrated organisational structure;
- financial incentives that involve sharing risk with the primary care physician; and/or
- a series of utilisation controls applied to provider practices.

In the US fee-for-service (i.e. item-of-service), non-managed care sector, these characteristics are not typically present. The remainder of this section offers a brief overview of the managed care phenomenon.

In the US, the 1980s have witnessed revolutionary change in the organisational approaches for delivering and financing health care. At the beginning of the decade the great majority of working Americans were covered by private indemnity health insurance programmes purchased as a benefit by their employers. Under such programmes the employee and his/her family were free to choose any fee-for-service (FFS) doctor or hospital they wished. The majority of providers, practised independently (of each other and of the financier) and viewed the so-called third party insurance companies as distant, unseen entities that reimbursed, more or less, whatever was requested of them. Government sponsored Medicare (the federal programme for the disabled and elderly) and Medicaid (the state/federal programme for the poor), although a bit less flexible, were patterned directly on this private employee health benefit model.

Health maintenance organisations, originally called Pre-Paid Group Practices (PPGPs), owed their genesis in part to American worker groups attempting to emulate European sick-funds they had known before immigration. Their quest for comprehensive, affordable care was joined (for both philosophical and financial reasons) by large multi-specialty physician group practices, then flourishing in the American Midwest and West. The first PPGPs, because of their philosophical approach and the use of salaried physicians, were vehemently opposed by the American Medical Association (AMA) and considered unwelcome harbingers of socialised medicine. Initially, the local

chapters of the AMA went so far as to ban PPGP doctors from their midst.

Much later, in the 1970s, PPGPs were re-christened (for marketing purposes) as Health Maintenance Organisations and embraced by the Nixon Administration as vehicles for health care cost containment. By 1980, HMOs were the subject of much attention and government subsidy, but were the health plan chosen by only about five per cent of all Americans. Of the persons then receiving care from HMOs, 80 per cent did so from staff/group models, with the remaining 20 per cent enrolled in individual practice association (IPA) model plans.

Staff/group model HMOs are large clinic-like organisations where (in general) doctors serve patients of only a single HMO. In staff-model plans the doctors are salaried employees of the HMO (though they usually participate in profit-sharing arrangements). In a classic group-model plan, doctors form a legally distinct group (i.e. a separate corporation), which in turn contracts with a single client, the HMO. The largest HMO in the country (serving about five million consumers), Kaiser-Permanente, is of this type: Kaiser is the HMO corporation, Permanente is the group practice. (Note that although all HMOs are corporations, about one third, serving 51 per cent of all HMO enrollees, are non-profit. In such plans excess revenues are returned to the organisation rather than to shareholders).

Individual practice association-model HMOs were originally made up of solo (i.e. single-handed) practitioners engaged primarily in FFS-based private practice. These doctors desired to compete with large pre-paid group practices by offering a health plan of their own. The majority (78 per cent) of HMOs are now of the IPA variety. (Although less numerous, the staff/group model plans treat a large proportion—39 per cent—of HMO patients.) Today, rather than comprising only solo practices, most IPAs are made up of networks of many medium size, legally distinct, multi-specialty groups which may treat the patients of more than one HMO, as well as non-HMO FFS patients. Today, IPAs are often termed IPA/network-model HMOs.

Most American consumers, or employers acting on their behalf, choose from among a stunning array of competing health insurance plans, which continue to evolve at a very rapid pace. Unlike the so-called traditional private insurance plans (the non-profit Blue Cross/Blue Shield plans found in every state, and the over 700 commercial insurance companies), many managed care arrangements are characterised by an integration of the financing and care provision roles. The boundaries between these two functions are often blurred, and in some cases nonexistent. Health plans that vertically integrate the insurance and provider function, as well as the various levels of care (e.g. primary, secondary, tertiary and long term), are collectively termed 'alternative delivery systems' because they offer an alternative structure to non-integrated, traditional indemnity plans. (It should be noted that many conventional insurance companies also own and operate alternative health plans as subsidiary businesses.)

As of 1989, well over 50 per cent of all Americans were enrolled in one of 1,500 managed care plans (Gabel 1988). In addition to fully integrated group/staff model HMOs and IPA/Network-model HMOs, other US

managed care arrangements include entities that have been labelled: preferred provider organisations (PPOs); competitive medical plans (CMPs); health insuring organisations (HIOs); managed indemnity plans (MIPs); and triple-option plans (TOPs). Given this flurry of acronyms, many derisively call these organisations the 'alphabet-soup' or 'three-letter' health plans. For better or for worse, this fast-paced, seemingly unbridled evolution has led to health care delivery systems that reflect almost every organisational and financial arrangement imaginable.

With caution and sensitivity to the British milieu, we will draw from the managed care movement to identify those facets that have direct relevance for the budget-holding debate. This experience will be used to illuminate both the potential benefits and pitfalls of GPs as budget managers. Furthermore, where flaws are identified, possible solutions will be offered.

Those readers interested in a further description of the intricacies of US managed care will find a glossary of related terms in Appendix 1, and a comprehensive list of readings in the bibliography.

HMO financial structure

An HMO is a managing or integrating corporate entity that receives a fixed, prepaid sum of money from which it must deliver or arrange for the delivery of health care to a defined population. Except in a handful of cases, where the HMO places doctors on a straight salary, most HMOs contract with primary care group practices or individual primary care doctors to provide care. These doctors almost always share at least some of the financial risk to which the HMO is exposed. The adage in the US is that 'if you have seen one HMO...you have seen one HMO'. While not entirely accurate, there are in fact hundreds of organisational and financial variations around the common HMO theme.

The basic organisational and financial approaches

adopted by HMOs have a high degree of relevance for budget-holding. One such scheme will be described in some detail following; however, before discussing financing and risk, it is important to review the basic organisational framework within which HMO risk-sharing occurs.

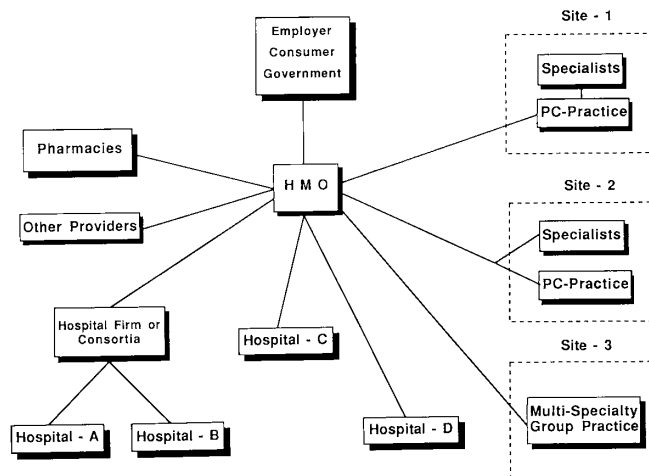
A typical organisational arrangement found in network model HMOs (which comprise a number of private independent, group practices), is summarised in Figure 2. The HMO entity is legally (i.e. corporately) separate from all providers within the system. It receives a monthly premium or payment from employers (on behalf of their employees), consumers, and in the case of persons eligible for Medicaid or Medicare, from state or federal government. In return for this fee, the HMO is legally obliged to supply care through providers in its network. The HMO contracts with as many group practices as necessary to cover its geographic market area.

In the simplified model outlined in Figure 2, the HMO has developed contracts with three groups or sites. At site one, the HMO contracts with a primary care group practice, which in turn, has a sub-contract with office-based specialists (i.e. consultants) to provide care on referral. (Note — in the US, general practice, internal medicine and paediatrics are all considered 'primary care', and as a general rule, US consultants are not employed by hospitals.) At site two, the HMO itself has separate contracts with a primary care group and individual specialists. Among network and IPA model plans, this is probably the most common contractual arrangement. At the third site, the HMO contracts with a single multi-specialty group where both specialists and generalists practice side by side (this is common in the US).

Note that the HMO contracts directly with two individual hospitals and a hospital consortium (or chain). It also is responsible for contracts with individual pharmacies (or a pharmacy chain), as well as with other

Fig. 2 Summary of Typical Organisational Framework In A Network Model HMO

PC = Primary Care



Under the arrangement outlined in Figure 3, the HMO parent organisation contracts directly with the primary care physician group. When the contract commences, the HMO creates two funds or accounts — a primary care fund and an institutional/referral fund. In most cases, the two budgets are used for accounting only, i.e., the monies reside at the HMO's bank. Every month, the HMO credits each of the two funds with an actuarially determined capitation payment based on the number, age, and sex of all HMO members enrolled with the practice. (The roster is subject to change as patients enter and leave the practice.) The amount credited to the primary care fund reflects the resources needed to provide primary care services: all care delivered directly by the groups' doctors and other support staff (which may include nurses, nurse practitioners and others) and a negotiated list of basic laboratory and x-ray investigations usually performed within the practice itself.

risk; however, these doctors must adhere to predetermined standards of practice (this will be returned to at a later stage in the paper).

Most HMOs negotiate all hospital contracts. Payment to the facility may take a variety of forms, including: item-of-service (as used by most private insurance plans in the US) with or without a volume discount; a fixed-price per diem of service for different classes of care (e.g. maternity, surgical, coronary care unit); or, similar to the Medicare programme, a Diagnosis Related Group (DRG) based per-case payment (Kralewski 1982; Kongstredt 1989).

All services, other than care for life-threatening emergencies, must typically be either delivered by or on referral from, the patient's primary care physician who sometimes is termed the gatekeeper or case-manager. All non-emergency care must be delivered by providers contracting with the HMO. If a patient obtains services from outside the plan, the HMO will not pay for such care. (A recent HMO variant, known as the open-ended HMO, will pay for a portion, though not all, of out-of-plan use.)

Once the patient has received specialist or hospital care approved by the gatekeeper, the provider of that service bills the HMO and the fee is debited from the practice's institutional/referral fund. In most plans a stop-loss mechanism is in place so that individual patients requiring services costing above some yearly threshold, say \$7,500, will have these costs paid from a separate HMO reserve fund rather than from the group's account.

Fig. 3 Financial Arrangements In A Typical US HMO

Key: * Only if there is Institutional/Referral Fund 'Surplus' at end of period.

**** Only for expenses over stop-loss**

*** Only if fund is over expended.



representative of the HMO, who will review the admitting criteria before the admission is approved. Usually there is a concurrent or retrospective review of key decisions, e.g. the decision of when to discharge the patient.

In return for providing primary care services (including caring for common medical conditions in hospital), the primary care group receives a monthly payment equal to the HMO's credit to the primary care fund for that month, less a withhold. This withhold is generally 10-20 per cent of the monthly credit and is retained in another account by the HMO. This withhold fund is at risk for a designated period of time, usually until the end of the accounting or calendar year.

At the end of this period, a financial assessment is made of the balance in the institutional/referral fund. Those practices with a positive balance in their designated fund will receive the full amount in their withhold (or as some doctors say 'hostage') fund and possibly an additional bonus. This bonus is often based on a share of the surplus in the practice's own referral fund and/or a pro rata share of the total surplus (if any) aggregated across the institutional/referral funds of all primary care groups contracting with the HMO. The formulae for calculating a bonus can be quite complex.

In the event that a deficit exists in a practice's institutional/referral fund, the HMO will generally apply the practice's withhold to this deficit or return only a portion of the withhold. In addition, if the HMO as a whole enjoys a surplus (because other participating practices were more successful) the practice with a deficit will usually not be eligible to share this profit.

Thus, in a typical HMO, the primary care doctors are offered several levels of financial incentives to manage their patients efficiently. These incentives tend to rely more on bonuses than penalties. Both bonuses and penalties can, and do, directly affect the doctor's income; however, under the arrangement described, resources expended from the institutional/referral fund are not viewed as coming directly out of the group's own pocket.

Variations on the above arrangements are worth noting. Although the two fund approach is typical, some HMOs have separate funds for specialist services and those provided by the hospital. Others have a still greater number of funds, with additional accounts for laboratory, x-ray and pharmacy. These HMOs usually rely on a formula, weighted across funds, to determine financial penalties or rewards. Regardless of the number of distinct funds, most HMOs keep a careful account of a group's expenditures by detailed cost-categories. This information is usually shared with the group via periodic practice pattern reports.

In most large group-model HMOs and in some network-model plans, specialists practice alongside the generalists. In such plans, reimbursement for specialists' services are frequently folded into the group's capitation fee (as might be the case for site three outlined in Fig. 2).

Although uncommon, a few large HMOs use a total capitation approach where all costs (excepting those above a stop-loss threshold) are expected to come out of a single fund. In these plans it is sometimes the practice's responsibility to negotiate all arrangements with outside sub-contractors such as hospitals, although usually the HMO still plays this role.

The evidence that HMOs are cost effective systems of care compared to traditional fee-for-service is strong (Luft 1981; Manning 1984). It is generally accepted that when compared to fully insured people receiving care under FFS, persons under the care of doctors in HMOs receive more ambulatory and preventive care, and from 10 to 40 per cent less hospital care (due to lower admission rates). Overall, financial savings are estimated to be in the 5 to 30 per cent range. When the US FFS system is compared to the NHS, many, though not all, services are provided at higher rates; therefore, it is not clear if HMO-like organisations would have such dramatic effects on efficiency in the UK.

It is unclear, however, what role risk arrangements such as capitation, withholds, and fund structure, play in HMO efficiency. Recent case studies and aggregate surveys have suggested that these financial incentives have not always worked in the manner anticipated by their architects. Stringent controls are no guarantee that providers will practice efficiently (Hillman 1987; 1989; Moore 1979, 1983).

In addition to financial arrangements, it is important to appreciate that when compared to more traditional US medicine, there are at least three other characteristics that make the practices of HMO doctors different:

- 1 the ethic of their collective organisation;
- 2 the utilisation (UR) controls they face; and
- 3 the special nature of their patients.

Most large group/staff HMO environments are noted for a high degree of organisational ethic. This typically is brought about by a strong team approach and an ardent clinician leader/manager setting a professional standard. This phenomenon does not exist in solo practice and is rare in smaller groups. Studies suggest that where such an informal ethic exists, independent of financial incentives, the behaviours of the group members tend to conform (Eisenberg 1986).

As mentioned earlier, HMOs were key initiators of utilisation oriented controls. These UR controls, or as they are now often called, managed care controls, rely mainly on formal comparisons of the doctors' practice behaviours to pre-determined standards set by his/her peers (or managers). Although there is still debate about their effectiveness, the general consensus is that these controls have an impact on decreasing the costs of care (Eisenberg 1986; Stoline and Weiner 1988) (See Appendix 1 for a further discussion of managed care controls.)

The last factor that may make HMOs different is their patients. Many studies have indicated that there is a degree of biased selection, in that only certain types of consumers choose a prepaid plan over other plans available (i.e. conventional insurance plans) (Wilensky 1986). For a variety of reasons (e.g. that sick people do not like the restrictions placed on them by HMOs) there appears to be a favourable selection bias, with the healthier patients joining HMOs. A well-designed experiment (albeit at only one HMO), suggests that even after selection is controlled for, patients are treated more efficiently by HMOs (Manning 1984). The implications of selection for capitation rates and quality will be discussed further in later sections.

In America there is now a developing controversy

surrounding the issue of placing HMO physicians at financial risk (Reagan 1987; Levinson 1987; Medical Economics 1989). This debate is taking place within the HMO industry and elsewhere, including the US Congress.

Although still a minority, a number of large HMOs have concluded that financial incentives placing doctors at risk for services provided by others have not been completely effective. Some HMOs are now redesigning their incentive structure. While certainly not ignoring the financial efficiency of a physician, other non-monetary factors are being considered in the design of reimbursement schemes. Moreover, many HMOs are finding that rather than creating complex financial incentives that encourage primary care doctors to practice cost-effectively, it is more advantageous to capitate the doctors for the primary care services they provide and monitor their ability to manage referrals for consultant and hospital care. If the group demonstrates an inefficient practice style unamenable to change, the group's HMO contract is terminated.

In part, because of improprieties involving a single HMO (and several government officials) participating in the federal programme for the over-65s, recent Congressional legislation states that as of April 1990, HMOs serving Medicare recipients shall not 'mak(e) any payment, directly or indirectly, to a physician as an inducement to reduce or limit services'.

Another factor has contributed to the perception of ineffectiveness of risk-sharing. Recently, cost inflation within the US health care insurance industry has reached double digits. Many HMOs, like other insurance plans, have not done well (in terms of excess revenue); withholds have rarely been returned to the primary care doctors and bonuses have not been forthcoming. In general, HMO doctors have become somewhat inured to this pattern of non-payment.

Yet another reason risk arrangements are being questioned is malpractice. In our litigious society, several multi-million dollar lawsuits have claimed that HMO financial incentives have contributed to doctors not providing needed services, which in turn has contributed to instances of medical negligence. This issue must be placed within the context that about 10 per cent of all American doctors are sued every year; few facets of the system have escaped lawyers' scrutiny.

Various new arrangements are being initiated by some of America's leading HMOs in response to these concerns. These systems still rely on capitation of the primary care providers for their own services; however, rather than additional risk arrangements, these HMOs are relying on strengthened UR controls, improved information systems and, in some cases, bonuses based on non-financial quality factors to encourage doctors to provide and arrange for high quality, cost-effective care. It should be underscored, however, that the HMO entity still bears the ultimate financial risk and is responsible for making decisions as to the balance between primary and secondary services. Its incentive to avoid unnecessary care and expensive institutional care is still quite strong.

An example of this type of financial model is one being developed and implemented by the very large HMO system owned by the CIGNA insurance company. In CIGNA's new scheme, primary care doctor groups are

paid a monthly capitation, but no withholds will be at risk based on expenditures from the group's budgeted institutional/referral fund. Although the HMO will still set up an institutional/referral fund for each group, it will be used only to help the practice (and HMO) gauge the group's performance. This performance will be only one of several components in a new bonus system. The HMO intends to award bonus payments to its well-performing group practices based on three factors that demonstrate excellence:

- 1 cost-effectiveness, as measured by the practices' management of consultant and hospital costs;
- 2 patient satisfaction, as measured by surveys of consumers; and
- 3 quality of care, as measured by indicators still being developed.

The HMO can terminate the contracts of primary care doctor groups that do not provide care consistent with the HMO's standards for excellence.

Other large HMOs are also beginning to introduce quality factors into compensation arrangements in a fashion not dissimilar from the good practice allowances factors identified by the Royal College of General Practitioners, aspects of which were incorporated in the Government's 1986 Green Paper on primary care (RCGP 1985; DHSS 1986).

Organisational networks

Although the financial relationship between an HMO and a given group of doctors is relevant to this analysis, so too is a further understanding of how US HMOs have organised themselves to serve as the middlemen between the payer (e.g. consumer, employer, government) and the providers (e.g. primary care groups, specialists and hospitals).

An HMO entity may be owned by a consumer collective, some other non-profit legal entity, an insurance company, a group of doctors, or private investors. In staff model HMOs (about 11 per cent of all plans) the doctors are employed by the plan. In a group model plan (another 11 per cent of all plans) the HMO contracts mainly with one group to provide care, but this group almost always has separate sub-units dispersed geographically.

Most common is the IPA/network model HMO, which accounts for the remaining 78 per cent of all plans. This type of HMO contracts with a number of group practices and/or solo providers (as in Figure 2). What makes this latter type of HMO arrangement different from current NHS contracts channelled through the Family Practitioner Committees (FPCs) is that, unlike the FPCs, the HMOs are fiscally, legally and managerially responsible for delivering all care. They are financially rewarded or penalised based on their success at staying within budget. Moreover, consumers have free choice to leave an HMO after some fixed time period, usually a year. If an HMO is able to attract more consumers than its competitors, the organisation, and potentially its profits, will expand. If it cannot attract and retain patients or is inefficiently run, it withers.

Very few HMOs own or operate hospitals. More commonly, because of their power and resources, a

number of large hospitals have spun-off sister corporations that own and manage HMOs. Not surprisingly these HMOs direct as many patients as possible, into the parent hospital. Some have suggested that this is not a sound premise on which to base an HMO. In the US, a hospital's main financial objective is to keep its beds filled; an HMO's goal is the opposite.

Some HMOs were started by group practices or other collectives of physicians such as county or state medical societies (the local units of the AMA). In these plans, the management and fiscal responsibility is virtually always borne by a legal entity separate from the physician group. In addition to risk-sharing mechanisms described previously, the founding physician body, through stock ownership, may also share overall profits or losses with the HMOs. The successful physician-sponsored HMOs are usually based on a very large collective of physicians, often involving several hundred practitioners.

Initially, following the passage of the 1973 HMO Act by Congress, the US government offered subsidies, loans and technical advice to those wishing to start an HMO. This assistance was targeted at not-for-profit organisations. As cited earlier, most private doctors were at that time hostile to these competitors; therefore, plans

had to hire their own doctors or link themselves with a limited number of group practices supportive of the pre-paid concept. For these reasons, most early HMOs were non-profit staff/group model plans.

The government has not offered assistance for some time. Given the requirement for substantial start-up capital and management expertise, most new HMOs have been started by insurance companies or for-profit business concerns. Because it takes less capital to construct a provider network from existing facilities (as opposed to building a new clinic-like health centre) and because most private US doctors have begrudgingly resigned themselves to the HMO concept (and no longer boycott them) the majority of plans started within the last five years are of the IPA/network variety.

For these and other historical reasons, the US HMO Industry is made up of some strange bedfellows. At one end of the spectrum are single-site, non-profit consumer-oriented collectives that initially saw themselves as socialised alternatives to the insurance company/AMA dominated big business of private practice. At the other end are multi-site chains that are subsidiaries of multi-billion dollar for-profit corporations. HMOs come close to being all things to all people.

Pricing and incentives

A premise of both the budget holding and HMO concepts is that the systems will more effectively *manage* societal resources. A sound conceptual framework is not enough, however. Managing a complex health care delivery/financing organisation, such as a budget holding practice, requires specialised personnel, tools and techniques. In this section, we will discuss selected topics related to the broadly defined theme of management control.

Considerable interest in strengthening NHS management predates the White Paper (Maxwell 1988). Accordingly, improved management structure is a key theme in most of the government's working papers. With only a few exceptions, past and present attention has been directed at hospitals and not primary care. Budget holding practices will involve a series of managerial challenges that will be unique within the British context.

Management control does not operate in a vacuum. Many administrative issues relate to the broader themes of financing, organisational structure and social equity. Here we will focus on support systems for micro-management. The general intent will be to identify what the US experience can add to the budget-holders' managerial armamentarium. The other more macro issues are discussed elsewhere.

A key characteristic of budget holding is that hospitals will provide services to participating practices on a selectively contracted basis. In many ways, the management system issues that surround the role of hospitals and their consultants are as controversial as those directly related to the GPs themselves.

In addition to legal and negotiating expertise, both parties to the budget holding contract will require extensive hospital-services cost information, surpassing anything currently available in most British institutions. This hurdle will not be trivial.

From the turn of the century until quite recently, US hospitals have been reimbursed almost entirely on a cost specific basis. Even with this history, in negotiating with HMOs and others, the 7,000, or so, free-standing American hospitals constantly struggle to price their services to reflect the true costs of doing business. Many consider the process as much art as science. Nonetheless, the US hospital industry and the multi-national accounting firms that service them are a huge repository of expertise in this area.

Even if costs are known, much will depend on budget holding GPs being able to effectively negotiate in the new marketplace. With the advent of open contracting by District Health Authorities (DHAs), which may be bargaining on behalf of upwards of a hundred thousand persons, it is not clear that a lone budget holding practice with 12,000 patients and no negotiating expertise will have much power. In the US, most successful managed care-hospital contracts involve far

greater numbers. Sometimes, to add leverage, consortia of managed care organisations (including PPOs) are formed.

Contracts with budget holders (and with the DHAs) will offer hospitals a new set of incentives. These incentives can be expected to have some positive effects (e.g., encouraging competition on the basis of price and quality), but they are likely to have negative consequences as well. With services negotiated on a block grant there is at least some inducement to skimp. Unlike previous budgetary arrangements, the facility will be better able to reallocate unexpended revenues. For those services negotiated on a cost basis, there will be, for the first time, a not so subtle inducement for consultants to increase volume. The issues surrounding this changing web of hospital incentives are quite complex and fall largely outside the scope of this paper, but their impact on the success or failure of budget holding is considered below.

The hospital-GP contracts can be expected to offer consultants subtle, but powerful inducements to change their clinical behaviours. In most NHS hospitals today, the actions of consultants rarely have a major financial impact on the specialists themselves or their departmental budgets. While they may be exposed to some pressure not to contribute to an over-run of the hospital's fixed-budget, usually they are offered few strong incentives to underspend it.

With budget holding, much of this changes. If a consultant's hospital is working under a block contract, every service provided could be viewed as lost revenue. While it is not clear how much of the risk a facility will share with the doctor's unit, it is evident that hospitals could benefit by not insulating consultants from the effects of their own actions.

Under a block-contract scenario, when presented with a particular case, a consultant will be more likely to forgo at least certain tests or procedures (e.g., those that are questionable in terms of their benefit for the patient). While well trained, ethical doctors will never hold back care that is medically indicated and available, much of medicine and surgery is not so black and white; the grey zone is immense. International evidence documenting the wide range of practice pattern variation among doctors strongly supports this premise (Ham 1987).

An incentive to do less, especially in relation to expensive, invasive technologies, is not necessarily a bad thing, but obviously a line can be crossed where quality of care will suffer. It is at this line where the GP budget holder (and the DHAs and RHAs) must stand as guardians.

The budget holder's role as guardian is a bit different when the practice purchases services from hospitals on a cost/volume basis. In this instance, a consultant might be more likely to perform a procedure or test that was only possibly indicated. Furthermore, once consultants learn the intricacies of the financial

system they could even unbundle various phases of a diagnostic test or therapeutic procedure that previously were performed together for a single fee. This has been problematic in the US. Either of the above actions would provide the hospital or department with a greater number of reimbursable events. These phenomena would have quality and cost implications, but the latter would probably be more serious. Therefore, under this type of contract the GP's guardianship should be more fiscal than clinical.

In the US, both the underservice and overservice scenarios have counterparts. The first is similar to what can be found when doctors or hospitals are paid on a capitated basis (and where they can retain profits). This is the general type of criticism that has been leveled at HMOs and will be discussed further in the later subsection on quality.

The second situation is far more common in the US given that most hospitals and doctors are paid either on an item-of-service, or now, DRG-based case payment. To address this problem for the care delivered to the more than 30 million elderly and disabled people it insures under Medicare, the US federal government has instituted a wide-scale programme of control. It has formed a nationwide series of doctor-governed, independent watchdog bodies to monitor clinicians' behaviours under the fee-for-service incentive system. These (Quango-like) entities were initially known as Professional Standards Review Organisations (PSROs). In 1984, after Medicare began paying hospitals (but not doctors) on a predetermined, diagnosis-specific basis, these agencies were reconstituted and labelled Peer Review Organisations (PROs) (Dans 1985).

Both PSROs and PROs were presented to the medical community as quality of care monitoring organisations, when in fact the government in its role as payer was probably more interested in cost of care issues. The basic approach used by both PSROs and PROs was ongoing utilisation review where doctors are monitored primarily through medical record audits and profiling of practices using data extracted from computerised insurance claims systems. The measured behaviours, be they cost or quality oriented, are then compared to standards of practice developed by their medical and surgical peers. Hence the term peer review. Based on initial audits known as screens, the medical records of questionable cases are subject to review by a doctor's colleagues.

Virtually all HMOs subject hospital care to this type of review. The monitoring is especially stringent for those doctors that are subject to FFS incentives (e.g. specialists on item-of-service contracts.)

Budget holders should eventually bear some responsibility for monitoring the potential impact of the hospital/consultant contracts on quality and cost of care. Moreover, as the concepts put forth in the Medical Audit working paper (Working Paper 6, 1989) are debated, this aspect of budget holding should be considered as comprehensive quality monitoring systems are implemented across the UK.

On a somewhat different tack, the possibility of developing closer organisational and financial linkages between GPs and consultants is intriguing, both from efficiency and quality perspectives. In most large US HMOs, such doctors practice side-by-side and are subject

to similar professional and financial incentives. In the UK, could there not be a more significant role for the GP in some of their patient's hospital-based diagnostic work-ups? Furthermore, could not most budget holding practices make good use of a visiting-consultant who came to the GP's surgery on a weekly or monthly basis? These and other activities might lead to increased coordination and harmonisation between the care provided by GPs and consultants. Although the gulfs between these professional groups are difficult to traverse at times, close relationships would almost certainly benefit patient care. The budget holding practice, with its mandated contractual linkage, would provide a rare opportunity to foster such relationships.

Capitation rates

In HMOs and budget holding schemes there are a variety of technical and management issues that surround the development of methodologies for accurately and fairly determining a per capita payment.

British GPs currently have incentives to attract patients who are healthy, but these incentives are not primarily financial. A GP with a healthier list should have fewer requests for consultation and thus a lighter workload. This will lead to more free time or more time for patients; either situation is desirable.

Under budget holding the incentives begin to change as more money comes under the GP's control. Healthy patients needing fewer services become more appealing and sick patients less so. This would not be so if an effective case-mix adjustment system were developed; a lower per capita payment would be associated with healthier than average persons and a larger payment with those with greater morbidity. With a case-mix system in place, the health status of patients on a budget holder's list becomes more of a non-issue. It is possible that some practices might wish to attract sicker patients with their more generous payment. Such a practice could reach a desired income with a smaller list. Moreover, efficient behaviours (e.g. avoidance of hospitalisation) might be most rewarding for this type of case-load.

The White Paper acknowledges the case-mix issue by stating that budgets 'will be set at a level which reflects the relative need' of patients. It goes on to say that age will be applied to develop rates and 'in exceptional' cases other individual adjustments will be used. If a payment does not adequately adjust for need, serious issues relating to equity and quality are raised. Some of these will be explored in the next section. Following however, is a discussion of capitation adjustment approaches that have been developed and applied in the US.

As identified earlier, selection bias is said to exist when for one reason or another a patient population with a morbidity distribution different from the one on which the HMO based its per capita budget enrolls in the HMO. This issue has received recent attention in the US for two reasons (Wilensky 1986; Hellinger 1987). First, it is only within recent years that HMOs have begun to enroll elderly patients on any major basis; this group can experience an especially wide variation in morbidity. Second, scrutiny from employer groups is increasing; companies believe that they are losing money because of

favourable selection of their employees into HMOs. They charge (with some evidence) that HMOs are profiting unfairly because healthier employees are joining HMOs, even though the employer pays all insurance plans the same per capita amount.

In earlier years many HMOs affirmed that because they offered more comprehensive coverage than conventional insurers, persons likely to need such care joined their organisations. Early studies supported their claims.

In general, HMOs rely primarily on age and sex to calculate primary care capitation rates and to determine other budgets/funds. Studies have shown that these demographic variables alone explain surprisingly little (less than 5 per cent) of all resource use. Increasingly, other approaches are being considered. A number of investigators have developed and tested various sophisticated capitation adjustment schemes that have included such factors as:

- 1 Use of services during a prior year;
- 2 The occurrence of a non-discretionary hospital admission;
- 3 A person's current morbidity characteristics based on diagnosis; and
- 4 A person's functional health status as ascertained from a survey or examination.

Some of these case-mix adjustment schemes have been shown to improve the overall accuracy of capitation systems four-fold (i.e. to about 20 per cent) when compared to rates determined on the basis of age and sex alone. For primary care services, some systems have been able to achieve explanatory levels of around 50 per cent (Epstein 1988; Weiner 1989).

No case-mix capitation system in existence appears to come anywhere close to perfect prediction, i.e., 100 per cent association with expended resources, however, there are various methodologies that can improve upon age and sex alone.

The risk pool

Most HMOs, like other insurance entities, use actuarially derived formulae to calculate how much they should budget to meet expected outgoings from a particular claims fund. In developing such rates, the larger the pooled risk (e.g. number of persons) the better. The statistical property known as the 'law of large numbers' would suggest that probabilistic events (e.g. death, disease) will be more accurately predicted for large populations. Whenever risk is spread across a small population, there is always a greater likelihood that a chance event (say, an accident affecting all members of one large family) will have an inordinate impact on overall expenditures. In addition, small population groups are more sensitive to some sort of biased selection.

The size of a risk pool becomes an issue for an HMO at two levels. Firstly, the number of persons in the organisation's overall pool; and secondly, the number of persons in a pool assigned to a particular group of physicians. In the budget holding proposal, these pools are one and the same.

The small overall size of the budget holder's risk-

pool and its susceptibility to biased selection has been called the Achilles Heel of budget holding by a respected American analyst (Sheffler 1989). Based on the US HMO experience, Sheffler argues that rather than 11,000, a more appropriate pool would number at least 50,000, with 100,000 being even better.

While these figures are generally accepted ideals within the US HMO industry, we do not agree with his conclusion. It assumes that all risk resides with the budget holders (as it does with an HMO) and that no adjustments are made for biased selection. In the budget holding plan, the RHA and DHA will share a significant proportion of the risk; their pools — which also include the budget holder's patients — are far larger. Also, it is the intent of the government to develop reasonably adequate adjustments to compensate for biased selection.

In the US, the second issue related to risk-pool size is how few patients can be used as the basis of a subsidiary pool within an HMO. For example, what is the minimum number of patients required to set up an institutional/referral fund at one site within a larger HMO? While a risk pool which includes all practices in the HMO has the advantage of spreading the financial risk among a large number of doctors and patients, it also tends to dilute the incentives to practise cost-effectively. Physicians are not likely to change their behaviour if they perceive their individual actions as having little effect on overall expenditures.

On the other hand, while a risk pool composed of an individual practice's patients has the advantage of offering incentives to the doctor to be cost-effective, it does not allow for the financial risk of a few extremely sick patients to be evenly distributed across a large base. Given that no case-mix adjustment system is perfect, this will happen to all doctors from time to time.

Among HMOs, no threshold for a minimum practice pool has been identified on the basis of empirical study; however, a common rule of thumb used by many network HMOs is that 300 to 500 should be the minimum. (This range assumes that an appropriate stop-loss threshold is in place.) From this perspective, the budget holding floor of 11,000 seems more than ample.

Management information systems

Information, both fiscal and clinical, is the *sine qua non* of any health care organisation. However, information systems are difficult, expensive, and time consuming to develop. This will be especially so for organisations as complex and with as many objectives as budget holding practices.

The state-of-the-art of GP Management Information Systems (MISs) in the UK is mixed. While many large group practices have impressive clinically-oriented data systems, these systems are far from universal and none incorporate financial data.

As identified previously, hospital data will be crucial to the budget holding scheme. It is the general consensus that data systems in most British hospitals have a long way to go before they meet the basic standards suggested by the Körner report, let alone the more complex requirements needed to develop contracts with budget holders (Körner 1982). All in all, the issue of adequacy of information systems might well be budget-holding's real Achilles Heel.

Extensive experience with HMOs has repeatedly demonstrated that management information systems are a key ingredient for success. In fact, many believe that for IPA/network model plans, the scope and effectiveness of the MIS is secondary only to size of enrollment in determining success or failure. Some go so far as to say that in an IPA/network, the MIS is the HMO. Once the HMO makes its contracts with providers, the MIS is the glue that holds the organisation together. The same might be said of a budget holding practice.

It is essential that budget holders have detailed financial and clinical information that is both current and accurate. The system must be able to generate both standard and *ad hoc* reports regarding practice lists, practice expenses, patient demographics, budget inflow and outgo, service provision, diagnoses, referrals, investigations ordered and received, and hospital admissions.

An MIS for budget holding must not be designed solely by computer specialists or accountants. Its development will require a collaborative effort of a team that also comprises clinicians and day-to-day practice managers.

Once an MIS is in place, the system will be only as good as the individuals who translate the collected data into management information. This information must in turn be translated into management action. It is said that the 'M' — management — is what is most frequently lacking in MISs. To assure this level of relevance, it is the responsibility of managers to constantly monitor the integrity of the system's data and the utility of its reports. Without this, an MIS will almost certainly languish.

A major use of an MIS for budget holding will be to provide quality assurance and practice pattern data to clinicians. Numerous studies have demonstrated the importance of regular feedback in modifying physician behaviour (Eisenberg 1986).

Management expertise

Highly skilled non-physician and physician managers are essential to budget holding's success. The HMO experience suggests that a practice will require administrative staff with mastery of accounting, financing, computer sciences, contract negotiation, personnel management, quality assurance and operations research. The cost of hiring management staff with such skills would be prohibitive (even with special fees for this purpose), and expecting all of these talents to reside in one or two individuals is unreasonable. Moreover, many of the proposed budget holding activities are without precedent in the UK. Even administrators with proficiency in all areas listed above will have limited relevant experience.

It will be essential that GPs become intimately involved in management. All practitioners must have a lucid understanding of the basics of the practice's financial arrangements; it is not enough to simply take care of the patients. Furthermore, it will be critical that at least one clinician in each practice develops strong managerial and financial acumen. This individual will be in a position to effectively address the inevitable cost vs. quality of care issues and will participate in contract negotiation.

Training programmes in the UK will need to be

expanded. In the US, most universities have curricula in health care management, and although they were originally geared to training hospital administrators, some now offer specialisation in ambulatory care or HMO management. It is possible that such experience might help the health management programmes in the UK begin to enhance their training with budget holding in mind.

There are many US professional and trade associations that could provide training material and other resources to budget holders or to those designing curricula for them. There is at least one organisation, the Medical Group Management Association (MGMA), dedicated to the management of group practices (whether or not they are involved in HMOs). Also, the two main HMO associations, the Group Health Association of America (GHAA) and the American Medical Care and Review Association (AMCRA) spend a considerable portion of their energies developing tools and educational programmes to improve the management skills of managers within their member plans. The American College of Physician Executives (ACPE) is an organisation that is attempting to train physicians (a term used generically in the US for all medical school graduates) for management roles in health care delivery organisations.

Accounting problems

A major accounting/financial problem for HMOs is what has become known as the incurred but not reported (IBNR) expense issue. As services are provided to HMO members, the HMO incurs expense which may not be billed (reported) to the HMO for some time, for example because of a backlog or a slow reporting cycle. The expense to the HMO has thus been incurred but not been reported. It is therefore not reflected in the HMO's financial statement. This problem has resulted in many HMOs believing they were profitable, when in fact they were running huge deficits not discovered for months. A number of HMOs have failed because of management decisions based on this untimely information flow.

The effects of the IBNR problem will impact on those services that are debited from the GP's budget on a service specific basis (e.g. drugs and some hospital care). In addition to implementing accounting and billing procedures that ensure that all claims are reported promptly, the budget holders must construct lag schedules. These schedules are based on their experience with the amount of lag time between the date an expense was incurred and when it was reported. (See Birch & Davis 1982.)

Pharmacy services

In the UK, the portion of the country's health care budget expended on non-hospital pharmacy services (10 per cent) is significantly higher than in the US (4 per cent) (Office of Health Economics 1987). Moreover, pharmaceuticals are one of few line-items where the NHS's budget is fairly open ended. For these and other reasons, improving efficiency in this area is the subject of a working paper in its own right (Working Paper- 4 1989).

Under budget holding, pharmacy represents a

domain where some of the biggest savings might accrue, in part because of the unbridled current expenditure, but also because it is an area where the GP exerts a high level of direct control.

Based on experiences in some of the more sophisticated HMOs, there is a range of activities that budget holders, either alone or in consort with others (e.g. FPCs or a collective of budget holders), can take to assure they get value for money in this component of their budget.

One approach is to develop a drug utilisation review committee that investigates the effectiveness of new and existing drugs and develops clinical guidelines for their application. This source of guidance would be a useful and impartial complement to the information now obtained from pharmaceutical companies' marketing representatives. Using these standards and the prescribing pattern data from the Prescription Pricing Authority, it might be feasible to have this committee both monitor and provide feedback to the practice. Like all other monitoring, special care must be taken to adjust for differences in case-mix across practices.

HMOs have also applied several other approaches to manage their pharmacy services budgets. Most mandate that generic drugs, if available, must be dispensed by the pharmacy unless the doctor specifically requests otherwise. Although less common, many HMOs, with the assistance of their drug UR committee, have developed a limited formulary on the basis of cost effectiveness. Unless a specific waiver is granted, all prescriptions must come from this list. A few HMOs even go a step further and have applied a controversial policy known as therapeutic substitution. Under this programme, a pharmacist must substitute, within certain limits, a cheaper or more effective drug for an unapproved one prescribed by the doctor.

HMOs have also developed some patient-oriented controls. They often set certain limits on the number of units (e.g. tablets) a pharmacy may dispense. Often, for an expensive drug, the patient is begun on a starter dose of the new medication (e.g. for 5 days) to see if it is well tolerated. Also, most HMOs will not allow prescriptions above 100 tablets or a 30 day supply, whichever is less. This is believed to help eliminate waste.

No discussion of any proposed health care delivery innovation is complete without an assessment of how well it will meet patient needs, clinical and otherwise. Critics of budget holding and HMOs sing in unison when they say these systems threaten the quality of care delivered to individual patients. Moreover, some also raise the wider concern that budget holding could have some negative effects on equity within the NHS. Based on the US experience we believe that a few of these concerns are valid and others are misplaced.

All challenges to the budget holding scheme must be viewed in a wider perspective. When criticising the newcomer, it is easy to forget that no health care delivery system is perfect. The existing NHS and the non-HMO fee-for-service sector in the US are certainly no exceptions to this rule.

In any critique of the proposal, it is unfair to analyse budget holding's weaknesses in isolation. More appropriately the following questions should be asked:

- 1 Are the weaknesses of budget holding preferable to those found in the existing system, either because they are more amenable to control or because they are less objectionable? and
- 2 Is the net sum of budget holding's strengths and weaknesses greater than the sum of a similar accounting of the present system?

We are not bold enough to attempt direct answers to either of these questions. Besides, a full assessment of the present NHS, the alternative to budget holding, would go well beyond our expertise and the available pages. In the remainder of this section, we discuss selected topics relating to quality of care and social equity from the perspective of the US HMO experience.

Quality of care in HMOs

A brief digression for some definitions is in order: 'Quality' is an elusive term. 'Quality of care' is the concept of excellence in the provision of medical care. Lembke (1967) broadly defined quality as '*... how close the results of care approach the fundamental objective of prolonging life, relieving distress, restoring function and preventing disability.*'

Donnabedian (1980) considers high quality care '*... (as) that kind of care which is expected to maximise an inclusive measure of patient welfare after one has taken account of the balance of expected gains and losses that attend the process of care in all the parts.*'

Quality assessment can be considered the applied process of translating the concept of quality into one or more measurable attributes, and in turn assessing whether the attribute has been attained. Quality assurance (QA) goes a step further. It is the formal process by which a delivery organisation both monitors and improves the quality of the care it provides.

In the US, perhaps because of our system's many imperfections, we have the largest scientific literature in the world on approaches for measuring and monitoring quality of medical care. With these tools few aspects of US health care have escaped empirical scrutiny at one time or another (Donabedian 1980).

From the start of the HMO movement, quality was the preeminent issue. Detractors vehemently believed that the financial and organisational structure of HMOs were incompatible with good care. Supporters, just as vehemently, believed it was the HMO concept that led to good care. Over the recent decades, US health services researchers have expended a great deal of effort investigating this controversial issue. Moreover, HMO doctors and managers as well as government regulators have spent considerable time developing sophisticated systems for HMO QA and monitoring.

By 1980, a general consensus based on hundreds of published studies began to develop: care delivered by HMOs up to that point was as good, if not better, than that delivered outside of HMOs. Widespread skimping, leading to poor care, had not occurred as critics had feared. While it was true that many HMOs provided less of some types of service (notably surgery and in-patient care), this was rarely associated with lower quality (Luft 1981; Weiner 1986). Many believe that this decrease represented HMO doctors trimming waste; a significant degree of unnecessary care of this type was then believed to be delivered by fee-for-service providers. Given the general emphasis now placed on cutting waste throughout the entire US health care system, some have begun to ask whether these studies, if replicated in the late 1980s, would still show that HMOs can decrease service while maintaining quality.

In addition to a generally high level of ethics among most HMOs and their doctors, the fact that consumers if unhappy 'can vote with their feet' (i.e. leave the HMO) and that potential malpractice lawsuits weigh heavily on all American clinicians' minds, have been cited as key factors providing a balance to the fiscal incentive to do less. Furthermore, early HMO doctors who were frequently part of well organised group practices said that they rarely paid much attention to HMO finances and profits, unless they were reminded to do so by managers.

To continue with the good news ... some of the evangelical claims of HMO supporters proved to be correct. Many studies showed that HMOs were linked with superior primary care. They usually provided care that was more preventive, comprehensive, and coordinated (Weiner 1987). One must remember, however, that outside of HMOs, the US primary care delivery system is generally fragmented.

Now for some of the bad news related to quality ... the HMO movement has had its share of blemishes. There have been cases of poorly and unethically managed plans, whose founders and managers were

often more interested in money than patients. Perhaps the most notorious fiasco occurred in a state-wide HMO programme for the poor in California financed by the Medi-Cal (i.e. Medicaid) programme. In the early 1970's, a weakly conceived scheme with inadequate oversight led to a number of avaricious and mismanaged HMOs skimping on the services provided to the poor. The Medi-Cal HMO programme was eventually disbanded in disgrace.

In fairness, it should be noted that over time, California has become the leader in terms of contracting with high-quality HMOs who serve the poor.

Lessons were learned from this and other similar bitter experiences. First, patients in lower social classes, perhaps because they are not sophisticated users of medical care or because they are more prone to medical paternalism, are reticent to exercise their option of leaving a plan when care is patently bad.

Ensuring the patient's right to leave, although vital, is not always easy. Some Medicaid programmes have locked-in patients because of excessive doctor-shopping. Also, HMOs complain about the difficulties of managing a budget if too many persons are coming and going at will. These problems notwithstanding, Medicare mandates that HMOs let the patients it insures come or go on a monthly basis.

A second lesson involves the development of appropriate quality monitoring controls, again, especially for HMOs serving a large proportion of poor persons. External monitoring to identify the unscrupulous or simply inept plans should be part of any overall HMO-like scheme. Also, organisations should be encouraged to develop and operate internal QA systems to help improve their care. All care settings, without exception, would benefit from such a programme; this approach will always be more productive than external monitoring, but both approaches play a role.

Some of the approaches that HMOs and their regulators have taken to improve or monitor quality will be discussed following. Many might have relevance for the budget holding context.

Monitoring quality

A typical quality assurance process in an HMO consists of at least six major steps:

- 1 Identification of the problems or issues to be targeted as the focus of the QA effort;
- 2 Establishment of measurable criteria against which quality will be judged;
- 3 Collection of data from within the HMO to allow for comparison with the predetermined criteria;
- 4 Assuming that the ideal standards are not met, identification of a course of action expected to lead to an improvement of practice (or patient outcomes) within the HMO;
- 5 Introduction of the improvement activity identified in the previous step; and
- 6 Repetition of the data collection process (step three, above) to monitor whether or not the desired change has occurred.

The process continues until the monitoring activity shows that all standards have been met. At that point, the process returns to step one, new problems are targeted, and the process starts anew (Batalden 1980).

The QA process, especially in HMOs, has been described as a set of activities for improving the effectiveness and efficiency of health care. This inclusion of both effectiveness (which implies outcome of care) and efficiency (which implies concerns over cost of care) highlight the often parallel foci of cost and quality within QA programmes.

In the US, many activities that focus primarily on containing costs (e.g. utilisation review/managed care controls) have been mislabeled as QA activities, when in fact they focus on very few, if any, quality concerns. The issue of the inter-relationship between efficient care and quality care is a critical one, but by and large, QA programmes in the US have not done a good job of integrating the two sets of missions. This is changing to some degree. The government has recently launched the so-called 'effectiveness initiative' where major studies are being funded to help bridge this gap. As an aside, this large-scale, outcome-oriented research effort could provide many opportunities for collaboration with British investigators.

HMOs are considered the leaders of ambulatory care oriented quality assurance in America. This said, it must be acknowledged that the QA activity of the majority of HMOs is fairly modest. Typically, in a medium-sized plan caring for 50,000 persons, several doctors meet every other month and a staff person performs one or two medical audits on about 30 patients each. The focus of the audits is usually a very specific clinical issue (e.g. appropriate use of antibiotics for patients under treatment for urinary tract infection). While this type of activity is unquestionably better than none at all, some believe that QA programmes need to be expanded considerably and follow the lead of the handful of HMOs that have become pace setters in QA development.

The more sophisticated plans have attempted to incorporate a series of innovations into their QA programmes. These have included:

- 1 Application of management information systems. A good MIS can be interwoven into all phases of the 6-step QA process, including practice improvement (Steinwachs 1989).
- 2 Development of a population or community oriented school of QA. Here the emphasis is on a defined group of consumers (i.e. a list) and not on those few patients presenting to the doctor. Aspects of this approach relate to enhancing mechanisms for increasing consumer involvement in QA, both in terms of problem identification and in terms of population-oriented assessments of the degree to which needs have been met. Surveys are frequently used to obtain such input.
- 3 Development of an integrative, industrial model for assuring quality. This has to do with the HMO making an organisational commitment to 'Quality' (like the most successful industrial concerns). A few HMOs of this school have elevated a full-time physician to the position of vice-president or

associate director for quality of care. This approach also involves taking a wider view on what constitutes quality. For example, they might say that first-rate doctors, practising in an unkempt building, or who make a patient wait for two hours in a waiting room, are not providing high quality care.

The HMO's own actions are only part of the quality attainment process; the role of government as monitor is critical.

The US government is involved in several capacities. On a voluntary basis, HMOs may seek federal qualification. Although such plans must have internal QA programmes to meet the standard, the majority of criteria for qualification relate to the insurance aspect of the HMO and not the clinical. In earlier years a plan that met this optional qualification was eligible for federal subsidies and other benefits. About half of US HMOs are federally qualified.

In a similar fashion, state governments license HMOs as insuring organisations. Most of their regulations involve the adequacy of the HMO's financial reserves. With several exceptions, states limit their quality monitoring activities to persons enrolled in Medicaid programmes they directly control; otherwise, their regulations do not address clinical quality.

Beginning in 1988, the federal government funded existing Peer Review Organisations to monitor HMOs enrolling Medicare recipients. (Note — only 5 per cent or so of this elderly group is served by HMOs.) The various approaches used by PROs to monitor the HMOs provide insight into how an external body might choose to perform its role as guardian. The approaches proposed to identify the 'bad apples' among the HMOs include:

- 1 A medical record review of ambulatory care within an HMO if a patient was hospitalised for one of 15 sentinel event diagnoses. The 15 diagnoses were selected as indicators of advanced stages of disease that could have possibly been avoided if treated earlier. (Examples include diabetic ketoacidosis, gangrene and septicemia.)
- 2 Review of all cases in which the patient dies, either in or out of the hospital.
- 3 Review of the post-hospital care for all patients hospitalised with one of nine diagnoses suggesting that poor care has led to a preventable stage of disease.
- 4 Special site-visits of HMOs where problems are identified. The site visit would include an assessment of the adequacy of access to care by reviewing appointment logs and talking with patients.
- 5 Reviews initiated on the basis of a large number of formal complaints lodged against the HMO.
- 6 A review triggered by an increase or decrease in Medicare enrollment over or under a certain threshold (say a 20 per cent increase or a 10 per cent decrease). A site visit induced by such enrollment changes would include a random review of enrollee records.

- 7 Special reviews triggered by changes in Accident and Emergency (i.e. A&E) utilisation.

To date, the PROs are finding that these approaches have not identified many instances of sub-standard care among Medicare HMOs.

Although not applied on a wide scale, there are several private organisations that offer voluntary accreditation to HMOs that meet their standards. The most important of this group is the Joint Commission on the Accreditation of Health Care Organisations (JCAHO). Accreditation is new in HMOs, in fact, the JCAHO, which for years has set the defacto national standards for all US hospitals, recently changed its name and mission, in part as recognition of its new involvement with HMOs. Its review process emphasises the HMO's facilities, including availability of programmes and equipment.

Accreditation of hospitals in the UK has recently become part of the policy debate and might be worth considering for budget holders' facilities. Management systems and quality assurance (medical audit) programmes would be reasonable targets for review. So too would any equipment used to perform laboratory investigations (which will come out of budget) and the facilities available for minor (cold) surgery.

Equity: a two-class system?

Equity — equal access to quality care, without regard to income, race or social class — is a hallmark of the NHS (or at least of its underlying principles). In the introduction to the White Paper Mrs. Thatcher assures the Government's adherence to this premise: *'the NHS will continue to be available to all, regardless of income.'* Further underscoring this point, it is also stated that *'the patient's needs will always be paramount.'* Manifestos aside, there has been concern among critics of the budget holding proposal that the plan may exacerbate what is already becoming a two-tier system.

The first issue, discussed earlier in a somewhat different context, is biased selection. At its extreme, if no adequate case-mix adjustments are made and the budget holders attempt to cream or skim the best patients, it could lead to practices having lists composed of only selected persons. The less appealing patients would be left for the rest of the NHS to care for. We have discussed several approaches that might be applied to avoid this undesirable event as it relates to the biased selection of younger and healthier patients. There are also two other patient characteristics that might be appropriate to consider as part of the concern over creaming: socioeconomic status and private health insurance coverage.

For a variety of reasons above and beyond its association with morbidity, social class is an important element of the health care cost equation; patients from lower social classes may be more difficult and costly to treat, in part due to their generally smaller number of social supports and poorer nutrition. Some limited research in the US has suggested that HMOs have sometimes had more difficulty in caring for individuals from lower social classes (e.g. those enrolled in the Medicaid programme) than individuals from middle income groups (Ware 1986). On the other hand, when

compared to care obtained by the poor from non-HMOs, HMOs have often been assessed as doing well (Spitz 1987).

As the budget holding scheme is developed, it might be advisable to consider incorporating social factor adjustments as is currently being applied or considered as part of RAWP and elsewhere (Mays 1987). For example, capitation adjustments similar to those proposed by Jarman might be applied to budget holding practices enrolling a disproportionate number of persons with special needs (Jarman 1983, 1984). To a limited extent something like this is done by Medicare-participating HMOs in the US. When low-income elderly people enroll in an HMO plan, the HMO is paid a slightly higher capitation rate for the care of these persons.

The issue of a budget holding practice enrolling persons with private insurance coverage (e.g., BUPA) is an interesting one from an equity perspective and otherwise. Presently, patients having private insurance offer no significant financial advantage to a GP. Under budget holding, such patients could become quite attractive; services obtained under their private policy (e.g. elective surgery) would have otherwise accrued to the GP's budget. Initially the Government will develop a practices' budget based on its patients' historical patterns of NHS use. These patterns include persons with private insurance who will use fewer NHS services. Eventually — after the base year — when fixed, national capitation will be applied to budget holders, those practices with a greater than average proportion of privately insured patients will profit. Moreover, budgets based on past experience, where GPs were not exposed to budget holding incentives, may not accurately reflect future expenses. Under the new scheme, GPs will be offered stronger incentives to send insured patients to out-of-system providers.

While the Working Paper states (see item 4.16) that patients may not directly subsidise (i.e. top-up) a practice's budget for the above reasons, patients with private insurance may do so indirectly. This factor, in conjunction with the negative characteristics that may be associated with lower income patients, may offer a two-pronged incentive for doctors to seek a list with a particular social bias. To mitigate this trend, the Government might develop a downward capitation adjustment for patients with private insurance. For such persons, the actuarially determined value of the patient's private coverage could be subtracted from the per capita payment. In any case, if national capitation rates are to be used for budget holding, something like this will be necessary.

At present, health care services making no demands on the NHS budget help subsidise the exchequer. This may not be so under budget holding. In some or all cases, the RHA will pay the GP for the anticipated costs of a person's care regardless of whether or not the person has private insurance and obtains services from outside the system. The budget holding practice or RHA may wish to recoup these funds.

This is a common situation in US HMOs. Because family members may receive insurance coverage from more than one employer, it is not uncommon for one or more family members to be insured by both an HMO and a second insurance company. HMOs aggressively collect from the second policy under what is termed a 'coordination of benefits' or 'subrogation' clause found in their own contract. Budget holding practices, at the behest of the RHAs might make claims against a patient's private insurance plan. These funds would be returned to the RHA, minus perhaps a fee for the practices' collection services.

On a related theme, budget holding might serve as a subtle disincentive for the purchase of private coverage. If a large budget holding practice was successful at negotiating contracts with private hospitals, this could attract additional patients to the GPs' practice. However, it might also eliminate one of the biggest attractions of private coverage in the UK. Persons would no longer need insurance for access to private hospitals.

In the US, HMOs like all insurers, have developed alternative benefit packages for different monthly premiums. An employer (or Medicare) may purchase a basic package from an HMO on behalf of a consumer. It is common for the consumer to go a step further and secure a more comprehensive package, by making an additional payment. Such expanded coverage might include options like dental and optical care which are otherwise excluded by most HMOs. Although it might be considered controversial, if the demand grew large enough, a British insurance company could develop a product that was well integrated with NHS services offered by a budget holding practice.

Budget holding as it now stands will not be available to most persons residing in the small rural towns that span the UK; there are few GP group practices with the prerequisite list size in these locations. In the US, HMOs have not done well in sparsely inhabited areas for the same reason. However, a few rural HMOs have flourished by developing IPA type collectives where the risk pools of many doctors were joined together (Christiansen 1989).

Summary and recommendations

4

This section presents an overview of the key points of the foregoing critique of GP budget holding proposals. It also introduces specific recommendations for consideration by the Government and others as potential implementation of the budget holding scheme draws near.

This paper has pointed to many possible problems with the Government's proposal. A reader may well be left with the impression that budget holding and its HMO counterparts have few if any virtues. This is definitely not the case.

Before continuing with a summary of our criticism and a presentation of some suggested modifications, we want to take the opportunity to emphasise some of the very positive attributes of the budget holding concept.

Why budget holding is worth the trouble

When the goals of the Government's Working Paper are analysed in light of the HMO experience, we believe that the chances for their success are good. Therefore, *we do support the proposal*. Moreover, whether or not one believes that budget holding represents a better approach for delivering care in the UK, no one can question that there is much to be learned, provided the scheme is rationally phased in, monitored and critically evaluated. This knowledge could be used to improve many facets of the NHS, in and out of the budget holding context.

There are four major advantages to the budget holding proposal, as summarised in Box 1:

STRENGTHS OF BUDGET HOLDING

- 1 Will lead to increased integration between primary and secondary care sectors. This should:
 - Improve aspects of quality of care; and
 - Offer intrinsic incentives to improve efficiency.
- 1 Will lead to greater sensitivity to consumer needs.
- 1 Should provide fertile 'incubator' for NHS innovation.
- 1 Could allow for significant private-sector role, while helping to ensure overall coordination and social equity.

Foremost, the plan represents the first time in the UK that the two main branches of health care would become clinically and fiscally integrated. At present, the primary and secondary care systems are dramatically divided on both counts. To a large extent the primary care sector (i.e.

GPs) already controls a patient's entry into the secondary care sector. By offering GPs a high degree of financial control as well, overall quality of care should improve. This judgement is based partly on the premise that the scheme's organisational and financial structure will encourage the GP to meet patient and community needs even more than now. At the same time, the proposal will offer GPs added incentives to provide care at the most appropriate level of technical sophistication.

Many of the most vociferous critics of budget holding have been GPs who protest that the proposal will transform them into middle-managers or bookkeepers. Although sensitive to this concern, we believe that managing society's resources more efficiently with the goal of providing the most effective care possible given available moneys, is as vital to both the patient's and society's well-being as any task GPs now face. Who else is better able to decide whether a particular patient group is best served by more preventive, primary, secondary, tertiary or long-term care? These are not easy decisions, but with appropriate consumer input and with their knowledge of both the entire community and individual patients, GPs are in a unique position to play this leadership role.

The budget holding scheme has several distinguishing attributes when compared to the financial and organisational structure of the existing NHS:

- 1 It offers an internal market where the provider and purchaser of care are more separate;
- 2 It offers consumers a choice among several competing providers;
- 3 It is based on a fixed budget that encompasses both the primary and secondary care sectors; and
- 4 The individual GP is offered financial incentives to provide and coordinate care with an eye towards resource management.

All four of these characteristics can be expected to improve financial efficiency. They will also provide certain incentives to improve the quality of care.

The potential advantages (and disadvantages) of internal markets and competitive providers have been discussed eloquently elsewhere (Enthoven 1989, 1988, 1985). In general, these concepts are meant to introduce some free market forces into the British health care delivery process. The intent is to induce competition between providers on the basis of cost and quality and to remind them that the patient's custom should not be taken for granted.

The third of the above attributes of budget-holding, balancing a budget across sectors, should serve as a powerful incentive to give care at its lowest appropriate level. Many health policy analysts, especially those with a public health orientation, believe that this incentive is preferable to that now operating in most

industrialised nations — the incentive to provide care that is increasingly complex but often of marginal utility.

At the highest management unit of the NHS bureaucracy (i.e. the RHA) the budgets for all levels of care are merged. However, for a variety of political (e.g., the power of the hospital sector) and organisational reasons, the tendency towards lower technical levels of care has hardly been pervasive. This is more likely to be achieved by delegating budgetary decisions to budget holding practices.

As we have discussed in some detail, budget holding is structured to offer GPs (and hospitals) a number of indirect and direct financial rewards. Many of these incentives should serve society and patients well; others perhaps will not. On balance, though, we believe that with adequate controls these incentives will be preferable to those presently operating. Again we remind readers that current NHS financing does offer certain less than desirable incentives to doctors: For example, a GP's motivation to refer a healthy but troublesome patient; a moonlighting consultant's incentive to see a private rather than NHS patient. We do not believe that incentives can or should be done away with. They will always represent powerful influence within any delivery system. Rather than jettisoned, they should be harnessed and made more compatible with good medicine.

If budget holding is given a fair try — say over a three to five year period — and proves not to work out as effectively as we and its architects expect, most assuredly much will still be gained from the experience. As discussed in the body of this paper, one of the most notable characteristics of US HMOs and the managed care movement is the incredible speed with which HMOs respond to the changing health care needs and demands of their consumer markets. Budget holding GPs, relatively free from the encumbrances of a rigid bureaucracy, should be positioned to do the same. As in the US there will be much that can be learned from both successes and failures. Budget holding practices should provide an incubator for innovation within the NHS framework. Assuming that formal scientific evaluation of this innovation occurs, considerable knowledge will be gained. Without an appropriate evaluation process, valuable information will be lost.

The controversial issue of the private sector's role in delivering health care to Britons goes well beyond the scope of this paper, but those supportive of at least some private involvement should find a logical appeal in budget holders as conduits to this non-governmental sector. Budget holding GPs, with NHS oversight, are well suited to integrate services provided by private and independent hospitals with those managed by the NHS. The GP budget holding scheme could also serve as the framework for blending a basic government-provided health care package with additional privately purchased insurance benefits. Although this type of approach would raise many issues, the coordinating role of budget holders could help minimise the unfair subsidisation and duplication of coverage that now takes place.

Although we have criticised many of the specifics of the government's budget holding proposal, we do believe that the general premises embodied in the working paper are sound. As these fundamentals are translated into an actual programme, there are modifications and augmentations that we would suggest.

These suggestions are based on the need to surmount or compensate for the potential problems that are likely to face the budget holding scheme. The next sub-section summarises the hurdles and challenges that must be addressed.

Challenges

While the budget holding proposal contains many strengths, the challenges will be numerous. Most, however, can be addressed either by modifying the scheme's organisational and financial structure or by government regulation and oversight. The key challenges facing the budget holding programme are outlined in Box 2. These issues are summarised in the following paragraphs.

POTENTIAL CHALLENGES FACING BUDGET HOLDING

- 1 The proposed financial risk structure could potentially introduce doctors to several undesirable incentives.
- 1 Existing practice management systems will not be able to support this complex arrangement.
- 1 An 11,000 patient practice as the main organisational unit poses several problems:
 - A larger base might be required to develop sophisticated administrative support;
 - The risk-pool may be unstable; and
 - Too many GP practices will be excluded.
- 1 Present hospital pricing mechanisms are not adequate to support GP contracting.
- 1 Adequate quality controls are not built into the scheme.
- 1 There are inherent incentives for GPs to seek a 'select-clientele' for the practice.
- 1 The scheme offers no incentives to better integrate primary and community care.
- 1 No rational demonstration and evaluation phase exists.

It is proposed in the White Paper that financial incentives for GPs be structured around a single fixed capitation payment that is to support most (though not all) health care services. This is problematic to us for a variety of reasons. Although we support the integration of primary and hospital care budgets, there are better ways to avoid the perverse incentives that some GPs may feel. This can be done by subtly rearranging how budgets are accounted for and how risk is shared.

Even with the proposed stop-loss of £5,000, a risk pool of 11,000 patients may not offer enough stability against unpreventable fluctuations in health services utilisation. Moreover, this list size is troublesome for other reasons. Sophisticated information systems, new administrative tools and a multi-skilled cadre of

managers will be needed to support budget holding practices.

In addition to management support and risk pool size, there is at least one other concern related to the proposed base size of 11,000 patients: the majority of GP practices will be excluded from the programme, as will many parts of the country. Although it may be reasonable to limit the first round of the plan to the proposed threshold, it might be better to develop an infrastructure that could support the care given to the majority of British citizens.

Although the budget holding proposal emphasises changes in the primary care sector, another important goal is to exert pressure for hospital sector change. Provided budget holding becomes widespread, it is likely to have many significant impacts on hospital care in the UK. Many of these effects will be positive, but not all.

Budget holding will introduce hospital consultants to new incentives. Most notably, under a fixed contract consultants may be more likely to undertreat. With case or volume contracts there may be a tendency towards providing more, and potentially unnecessary service. To address the impact of these incentives on both efficiency and quality of care, the budget holding practice will need to develop approaches for monitoring the practice behaviours of the consultant.

There is at least one other significant hurdle related to hospital care. That is the ability of both hospitals and GPs to develop contracts that accurately price services. To do otherwise could bankrupt either of these parties or the NHS.

In addition to concerns regarding the behaviours of hospital consultants, there are an array of other possible threats to quality of care. The underlying general issue is the incentive on the GP to do less. In addition, under existing budget inclusions and exclusions, there is considerable manoeuvring room for the GP and the consultants to game the system.

Even with proposed controls (e.g. the stop-loss and use of age to determine capitation rates) there are many direct and indirect incentives for GPs to select certain types of patients for their list. Although no system can be designed to completely eliminate this bias, there are a variety of approaches that can mitigate it.

In the current NHS a series of concerns have been raised regarding the poor integration of the primary and secondary medical care sectors with community-based services. How the work of GPs should be coordinated with community nursing, social services and long-term care for the elderly and disabled is a prime example of this issue (Cumberledge 1986, Griffiths 1988). Moreover, some have criticised general practitioners (and the rest of the NHS) for not having an appropriately broad public-health or community orientation (Hart 1988, Acheson 1988). These critics charge that rather than addressing problems at a population level, there has been inappropriate attention to only the tip-of-the-iceberg — those patients presenting with symptoms. While the budget holding concept could have addressed this area, it does not. Some view this as an opportunity missed.

When the budget holding proposal is set into motion, like any other innovation it will lead to an array of positive and negative effects. To let this occur without a planned evaluation would be a travesty.

Recommendations

The previous sub-section has identified some challenges facing the budget holding scheme. In this paper we have offered a number of potential solutions to these problems. Eight key points are summarised as Box 3 (below). This last section will not reiterate all of these points, rather it will expand upon five key recommendations.

RECOMMENDATIONS FOR CONSIDERATION

- I Financial risk arrangements should be restructured in order to minimise perverse incentives and maximise those that are desirable. Specific proposals are presented in the text.
- I A 'networking' arrangement should be developed where multiple budget holding practices can be expertly managed under a single umbrella organisation. This would also provide a wider base for the financial 'risk-pool.'
- I A major development and technical assistance effort is needed to improve the management systems available to budget holders.
- I Development and technical assistance is needed to provide hospitals tools for use in pricing and contracting their services.
- I Mechanisms must be developed to monitor the quality of the care provided by budget holders and participating consultants.
- I A 'case-mix' adjustment methodology for calculating budgets should be developed. This formula could include such factors as age, sex, health status, private insurance coverage, and social class.
- I Special demonstrations should be developed to explore approaches for integrating budget holding practices and community care. For example, some GPs might hold the budgets for long-term care and other primary care providers.
- I A rational pilot-demonstration and evaluation phase must be designed. It may be wise to experiment with several alternative budget-holding models simultaneously. The evaluation should also include an assessment of budget holding's effects on those not enrolled in such practices.

Limiting financial risk

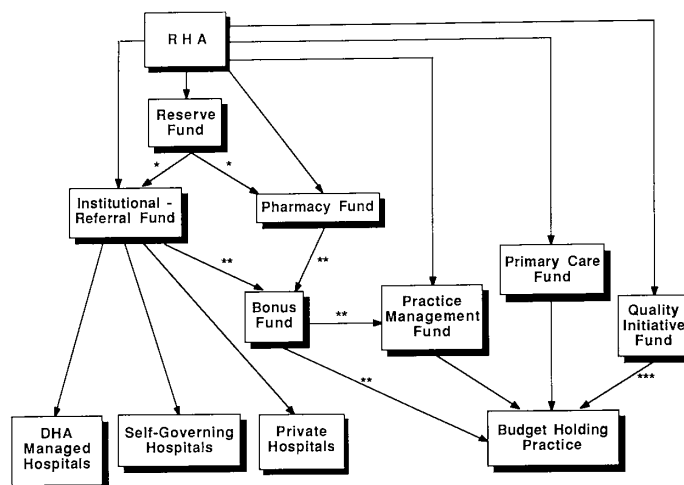
The basic concept behind budget holding may be sound, but based on the HMO experience, the proposal introduces a number of incentives that may not always be in the patient's best interest. Some can be dealt with using controls, but others may require changes in the proposed financial systems.

We suggest that the financial structure of budget holding practices be modified along the lines presented diagrammatically as Figure 4 (overleaf):

Fig. 4 Suggested alternative financial structure of budget holding GP practice

Key * For 'stop-loss' patients and if funds are over-expended.
 ** Savings will be split between GP practice and RHA (and possibly separate Budget Management Unit).
 *** GPs will receive if targets are met.

Note Existing practice-expense payments would still be made to GPs.



First, there should not be a single capitation fund where the GPs bear most of the risk. While GPs should continue to be at full-risk for the services they provide directly, they should not bear a large degree of risk for services they themselves do not deliver. Moreover, the system should not be prone to gaming. We propose a revised arrangement. The RHA would set up three major funds for each budget holding practice:

- 1 An institutional/referral fund;
- 2 A pharmacy fund; and
- 3 A primary care fund.

The first fund would be used to pay for all services from hospital and consultant providers. There would be no budgetary distinction between medical and surgical care, or elective and emergency care. From the second fund would come all pharmacy services. From the third fund would come most services presently provided by GPs under their current contract with a few possible additions (perhaps in the area of prevention, laboratory investigations and minor surgery). This scheme assumes (similar to the working paper) that certain operational expenses (e.g. rent) will continue to be paid separately.

The RHA would also make direct deposits into two other smaller funds. The first would be a distinct management fund that would represent the overhead of operating the budget holding arrangement. This would be paid to the budget holding practice or to some other (as we shall next discuss) larger coordinating entity. We also suggest that similar to the current new GP contract, there should be extra payments for practices meeting certain quality targets. A separate fund termed the quality initiative fund is proposed. This fund would be

paid to the practice only upon achieving certain clinical objectives. The targets could be similar to those now proposed (e.g. cervical cytology rates) or more broadly defined (e.g. based on results of audits and/or satisfaction surveys).

The RHA would also pay into (or hold on reserve) a special fund that would be used to cover all stop-loss payments and all cost over-runs.

Other than the primary care fund, which would be paid to the practice on a monthly basis, all other funds would not necessarily be controlled by the GP. They would be paid into an electronic account to be held by the RHA, DHA, or more likely an administrative unit acting on behalf of a network of budget holders. GPs would be informed monthly or quarterly as to the balance of their funds.

At the end of a designated period (probably one year), an audit would be made of the institutional/referral and pharmacy funds. If these accounts reflect positive balances, a significant percentage of the total would be returned to the practice to care for patients as the GPs deem appropriate. A small proportion could also be returned directly to the GPs in the form of added salary. This type of direct incentive is frequently offered to doctors in US HMOs. If the management unit was separate from the practice, it too would share in this profit (within a set of guidelines). Some proportion of the savings (say 50 per cent above the first £25,000) might also be returned to either the DHA or RHA to be expended on additional services in its geographic area.

We recognise that the NHS prides itself on having almost no user-fees. Based on considerable health services research in the US, we suspect that this has contributed to consumers requesting services that are not

needed (Cherkin 1989). It would be worth exploring the effects of budget-holders' charging a modest per visit co-payment (say, £3-£5) for the non-poor. This might decrease inappropriate use as well as provide extra resources for use in improving services.

The major difference between the financial arrangement we propose and that outlined by the Government is that we more fully circumscribe the GP's risk. The same general positive incentives remain, but the potential penalties are fewer. We believe that this type of structure would protect both the GP and the patient. Also, the quality initiative fund would add an extra dimension frequently talked about but largely untried in both the UK and in the US.

A budget holding network

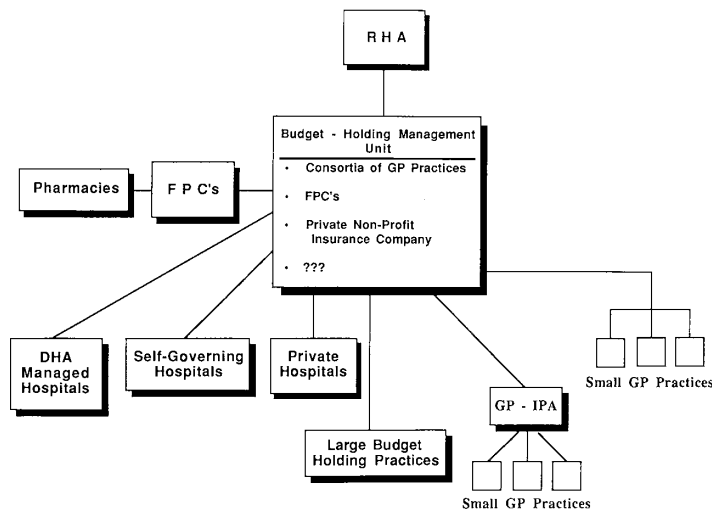
Even a large group practice might not be the best management unit around which to organise the budget holding scheme. While we agree that the GP group must remain the nexus of the system, a larger umbrella or support organisation could make the programme work more effectively. Although not elaborated upon, this option is left open in the Government's Working Paper

shared by a number of practices through the auspices of a separate management unit. This unit would be responsible for negotiating contracts with hospitals, developing information systems and managing all fund accounting and disbursement. This management unit could be a legally distinct not-for-profit company started by any number of entities: a consortia of GP practices; a single large practice that would take on contracts to serve others; a Family Practitioner Committee; or an insurance company. Any of these parties would have a degree of expertise in related administrative matters. The management unit is modelled after the central HMO organisation of a network-model HMO.

The budget holding management unit could provide services to large (i.e. lists larger than 11,000) GP practices. It could also service single-handed or small groups of GPs. This would expand the sphere of patients served by budget holding practices.

In addition to the administrative networking, there might also be the possibility for small GP groups or independent GPs to form financial collectives. This would help stabilise risk-pools. Like many IPA-model HMOs, the administrative unit would be legally distinct from the consortia of doctors.

Fig. 5 Suggested alternative organisational framework for GP budget holding network



(item 2.2) when it states that 'smaller practices will be able to group together if they wish to do so ...'. A separate management unit could be responsible for networking a number of geographically contiguous budget holding practices and offering them a range of administrative services. Figure 5 outlines how this organisational framework might work. It is loosely patterned after the network-model HMO.

While it would be some time before there were more than one budget holding practice in any given area, we believe that this basic framework should be designed into the scheme from the beginning. Under this network plan, a range of administrative responsibilities could be

There are several advantages of the network approach over that proposed. First, by pooling resources of smaller budget holding practices, a superior system of management support would be developed. Second, it would be a more efficient way of developing and monitoring hospital contracts and would provide GPs with more negotiating leverage. Third, if risk was pooled across practices and funds, it would expand the fiscal-base beyond 11,000 persons. A formula could be developed where gains and losses would be shared to a small extent across practices. This would provide the network with the incentive to work as a cohesive unit.

We realise that proposing FPCs (or a subsidiary

venture of an FPC) serve as management coordinators of both primary care and hospital care as well as share in some risk, is quite controversial. We also recognise that many FPCs have more than their share of problems in terms of meeting their current objectives (Marks 1989, Alsop 1986). On the other hand, their present function and placement in the NHS hierarchy suggest that they are well positioned to play this role. Moreover, their community oriented focus appeals to us.

Holding the budget for community care

The health of a community involves a multitude of factors, many of which can not be readily addressed by conventional doctor-patient clinical interventions. In contrast, the medical care systems in all developed countries are geared for one patient at a time interactions. This phenomenon has been characterised as tip of the iceberg medicine. The mass below water-line — the community — is left unseen and untreated. In the UK and elsewhere, those attempting to focus on the community-as-patient have not met with overwhelming success, in part because the mission is most difficult, but also because resources spent on public and community health efforts are dwarfed by those committed to traditional medical care. Moreover, existing community services are, by and large, provided in parallel rather than in consort with mainstream services.

Recently within the NHS there has been attention directed at several related issues:

- How GPs' activities should be integrated with community nurses and health visitors;
- The appropriate role for public/community health doctors; and
- How best to coordinate community care of the elderly and disabled with other services (Hughes 1989; Griffith 1988; Acheson 1988; Cumberledge 1986).

None of these community care concerns are directly addressed by the budget holding working paper. This was a missed opportunity. The budget holding concept might offer a creative solution to some of these problems if, in addition to GP and hospital budgets, GP practices managed the resources for all primary care and community care services.

Located in close proximity to the people it serves, a budget holding practice should be well positioned to match service delivery to the community's needs. Furthermore, if the budgetary scheme was properly structured, the incentives to provide community care would be strong, at least to the degree that less expensive community services could be substituted for expensive secondary/tertiary care.

Full development of the concept of GPs as community care budget holders goes well beyond the scope of this paper. However, the remainder of this sub-section shares relevant American experience.

In the US and elsewhere there is a small but devoted group of followers of a school of medical-thought known as Community Oriented Primary Care (COPC) (Hart 1988; IOM 1984; Nutting 1986; Kark 1981).

COPC, sometimes also called community epidemiology, has been described as a merging of the disciplines of primary care and community medicine. It is an appealing, though largely untested, approach for delivering health care services to an entire community, rather than to a collection of individual patients. More specifically, COPC is the process by which a practice, with consumer participation, identifies and addresses the major health problems present within the target population.

The steps involved in providing COPC include:

- 1 Defining and characterising the community;
- 2 Identifying the community's health problems;
- 3 Modifying health care programmes to best respond to these needs; and
- 4 Monitoring the programmes' impacts.

With adequate technical assistance, GP practices holding budgets for community care could readily accomplish these activities.

In the UK, aspects of COPC have been championed by a few public health doctors and a handful of GPs. Given the present distribution of resources, and the disjointedness of the various players, their task has been all but impossible. Budget holding GPs should meet with greater success. This is not to say that the undertaking will be easy for them: They lack epidemiologic expertise; they will be faced with a denominator population (i.e., their list) that will usually not be the same as a contiguous neighborhood; and they have little experience obtaining useful community input.

These problems should, however, be surmountable. For example, perhaps a consortium of practices could hire a trained public health doctor who would direct an epidemiologic survey to help document community needs and develop tailored responses. While a few similar efforts may have been mounted before, the linkage to practitioners and resources has never been as strong as it should be under budget holding.

One weakness of HMOs, like the NHS, is that coordination between primary/secondary medical care and long-term/community care has been far from ideal. In response to this problem, an off-shoot of the conventional HMO, known as the 'Social HMO' (S/HMO), has been developed and successfully applied on a demonstration basis (Greenberg 1988; Leutz 1985). The Health Care Financing Administration (HCFA) (the federal agency that manages Medicare) funded a series of creative projects testing this innovation. Unlike conventional HMOs, S/HMOs have forged contractual linkages with continuing care providers such as private home-care agencies, adult day care centres and nursing homes. S/HMOs, however, are more expensive than typical health plans due to the fact most of these services currently are not included in a conventional HMO's budget.

Like S/HMOs, community care budget holders would be responsible for purchasing home care or other long term care from either DHAs, municipalities or private providers. If they wished, they could form their own delivery networks either on their own or in collaboration with other practices. This could facilitate the development of sorely needed community-based providers.

The budget holding proposal, this paper, and most other documents addressing British health care, use the term 'GP' more or less synonymously with 'primary care'. There are, however, many other professionals directly involved in the provision of such care. The coordination between GPs and these other primary care providers has sometimes been less than ideal: they have often provided services in parallel rather than in consort. This has been due, at least in part, to the NHS organisational hierarchy. Primary care providers serving the same community usually do not view themselves as being part of a single cohesive delivery team with a common aim. Rather, these providers are individualistic contractors loosely amalgamated through the FPCs or salaried employees of several distinct bureaucracies.

In addition to GPs, community health staff employed by the HCCHS (e.g. community nurses), non-GP independent FPC contractors (e.g. dentists, chiropodists) and employees of municipalities (e.g. medical social workers) provide a multitude of essential primary care services. While there has been some success in coordinating the activities of these professionals (e.g. nurses attached to practices and multidisciplinary health centres), such cooperation is hardly universal. For example, less than one third of GPs practice in health centres (DoH 1989). Community care budget holders might represent an innovative approach for uniting the activities of these frequently scattered primary care providers.

In staff/group model HMOs this type of team approach is the rule rather than the exception. A multidisciplinary group of professionals usually practice side-by-side. Each receives a salary out of a unified budget. Staffing is based on the management's assessment of the needs of the target population. Moreover, this type of team approach has fostered the role of specially trained nurses (i.e. nurse-practitioners) in caring for simple, acute conditions under the doctor's supervision (Weiner 1986-B). HMOs are leaders in using these type of doctor-extendors. They have proven to be quite effective, pleasing not only patients, nurses, and doctors, but also the HMO's accountants. While certain professional autonomy issues would undoubtedly be encountered, budget holding practices might help foster an innovative redefinition of the roles of the primary and community care teams members.

Obviously a considerable amount of thought and planning must take place before the first GP practice ever holds a budget for community care. Also, such a major change would require well conceived pilot and evaluation phases. This aside, the concept is intriguing. Such organisations would represent the first time in the UK that a community-based provider would be offered the resources and incentives to meet the health care needs of its patients at the community, rather than institutional level.

Technical assistance

A considerable degree of resource development will be needed to assist budget holding practices, contracting hospitals and potentially the network-management units. This assistance will fall into the many different areas identified throughout this report. Moreover, the Government for its own part, will need to develop new

techniques to monitor the care provided by these organisations and for incorporating case-mix into the capitation payment.

Research and development technical assistance teams, perhaps based at major academic or private research and development centres, could serve as coordinating bodies for the development process. It will take money to do this, and it will also take a great deal of skill. While considerable technical expertise is available in the UK, there are also opportunities for learning from the US experience.

The Government or the technical assistance units could also fund add-on contracts so that the more sophisticated budget holders could develop tools for dissemination to others. Any development efforts related to hospital pricing and contracting should be closely coordinated with the effort linked to the other relevant White Paper proposals. Likewise, the quality aspects should be coordinated with the medical audit initiative.

Demonstration and evaluation

As outsiders we are admittedly a bit naive regarding the British political process. Accordingly, the great significance attached to the colour of a report's cover is confusing: green...blue... red...white? Regardless of ink colour, the budget holding working paper, though thoughtful, is far from a finished plan.

The first round of budget holding practices will represent pilot projects, the demonstration phase of the scheme. We join with all those before us calling for a rational approach for initiating and evaluating the plan. To do otherwise would lead to a lost opportunity to learn from the demonstration phase. To do otherwise would also, in all probability, lead to failure.

In addition to the HMO concept, the US health care system's penchant for health services research and evaluation is worth emulating. Before Medicare's Health Care Financing Administration first offered elderly people the HMO option in 1985, it had paid for over ten years of careful research and demonstration. Most of HCFA's initiatives involve a carefully phased-in pilot stage, where different providers test different facets of the programme (HCFA 1986). Moreover, HCFA's Office of Research and Demonstration has funded several large academic and private institutes to evaluate many aspects of Medicare's involvement in HMOs.

While there are some expenses associated with a careful demonstration evaluation phase, these monies are well spent. Committing two to five per cent of the programme's costs to such an endeavour seems reasonable. How many major corporations would spend less on their research and development budgets?

Based on the US HMO experience and our understanding of the British health care milieu, we are most definite in our belief that the organisational and financial concepts introduced in the budget holding proposal will offer advantages over the existing system. This conviction led us to write this critique. In so doing, we hope that the GP budget holding scheme will be just a bit more likely to succeed. The NHS is at a critical crossroads. With sensitivity to the Service's past and without losing sight of its visions, we believe that the budget holding proposal represents an opportunity for a creative and positive change.

References

- B. Abel-Smith (1989), 'The rise and decline of early HMOs: some international experiences'. *Milbank Quarterly*, 66(4), 694-719.
- D. Acheson (Chair) (1988), *Public Health in England*, The report of the committee of inquiry into the future development of the public health function, HMSO.
- J. Alsop and A. May (1986), *The Emperor's New Clothes: Family Practitioner Committees in the 1980s*, Kings Fund, London.
- G. Anderson, J. Cantor, E. Steinberg and J. Holloway (1986), 'Paying for HMO care: issues and options in setting capitation rates', *Milbank Quarterly*, Winter.
- P. B. Batalden and J. P. O'Connor (1980), *Quality Assurance in Ambulatory Care*, Aspen, Germantown, MD, U. S. A.
- G. Bevan (1988), 'Catchment populations, health maintenance organisations and cross-charging: a review of problems of different ways of delegating financial responsibility for their residents' use of acute services to English district health authorities', *Financial Accountability & Management*, 4(1), 1-19.
- G. Bevan (1989), 'Reforming UK health care: internal markets or emergent planning?', *Fiscal Studies*, 10, 53-71.
- G. Bevan, W. Holland and N. Mays (1989), 'Working for which patients and at what cost?', *The Lancet*, 29 April, 947-949.
- Birch and Davis Associates (1982), *HMO Management*, Monograph Series; Vol 1, *Guide to Development of Health Maintenance Organizations*; Vol 2, *The Design, Selection, and Implementation of a Management Information System for Health Maintenance Organizations*; Vol 3, *Health Maintenance Organization Critical Performance Measures: A Monograph for HMO Managers and Boards*; Vol 4, *Claims Liability Management in Health Maintenance Organizations*, Silver Spring, Md. (prepared under DHHS contract).
- N. Black (1989), 'NHS Review: Information please — and quick', *British Medical Journal*, 298, 586-593.
- N. Bosanquet, B. Leese (1989), *Family Doctors and Economic Incentives*, Dartmouth Press, Aldershot, Hants.
- N. Bosanquet (1986), 'GPs as firms: creating an internal market for primary care', *Health Care UK 1986*, Policy Journals, Hermitage, Berks.
- M. Brown (ed) (1981), 'Financial Management — HMOs', *Topics in Health Care Financing*, 8(2).
- J. Butler and M. Pirie (1988), *Health Management Units*, London, Adam Smith Institute.
- D. Cherkin et al. (1989), 'The effects of office visit co-payment on utilization in an HMO', *Medical Care*, 27, 669-679.
- J. Christiansen (1989), 'Alternative delivery systems in rural areas', *Health Services Research*, 23(6), 849-890.
- J. Cumberledge (Chair) (1986), *Neighbourhood Nursing — A Focus for Care*, Report of the Community Nursing Review Team, London, HMSO.
- P. E. Dans, J. P. Weiner and S. E. Otter (1985), 'Peer review organizations: promises and potential pitfalls', *New England Journal of Medicine*, 313: 1131-1137.
- Department of Health (1989), *Statistics for Research Medical Practitioners in England and Wales: 1977-1988*, London, Government Statistical Service, April 15, 1989.
- DHSS (1986), *Primary Health Care: An Agenda for Discussion* HMSO, London.
- A. Donabedian (1980), *Exploration in quality assessment and monitoring*, Vol 1, Health Administration Press, Ann Arbor.
- J. M. Eisenberg (1986), *Doctor's Decisions and the Cost of Medical Care*, Health Administration Press, Ann Arbor, Michigan.
- A. C. Enthoven (1989), 'A consumer choice health plan for the 1990s', *New England Journal of Medicine*, 320, 94-101.
- A. C. Enthoven (1988), 'Managed competition: an agenda for action', *Health Affairs*, Summer.
- A. C. Enthoven (1985), *Reflections on the Management of the National Health Service: An American looks at incentives to efficiency in health services management in the UK*, The Nuffield Provincial Hospitals Trust, London.
- A. Epstein and F. Cumella (1988), 'Capitation payment. Using predictors of medical utilization to adjust rates', *Health Care Financing Review*, Fall, 51-69.
- D. M. Fleming (1988), 'The case for differential capitation fees based on age in British general practice', *British Medical Journal*, 297, 966-967.
- J. Gabel, C. Jajich-Toth, G. DeLissovoy, T. Rice and H. Cohen (1988), 'The changing world of group health insurance', *Health Affairs*, Summer.
- General Practice in the National Health Service-A New Contract* (1989), Issued by the Department of Health and the Welsh Office.
- K. Gerard, O. O'Donnell, C. Proppper and A. Shiell (1988), Discussion Paper 47, *Reforming the UK Health Care System*, Centre for Health Economics, Health Economics Consortium, University of York.
- T. A. Gilman (ed) (1987), 'Alternative Delivery Systems', *Topics in Health Care Financing*, 13(3).
- M. Gold (1988), 'Common sense on extending DRG concepts to pay for ambulatory care', *Inquiry*, 25, 281-289 (Summer).
- N. Goldfield and S. Goldsmith (eds) (1987), *Alternative Delivery Systems*, Aspen Press, Rockville.
- M. Goldsmith and M. Pirie (1988), *Managing Better Health*, Adam Smith Institute, London.
- M. Goldsmith and D. Willetts (1988), *Managed Health Care: a new system for a better health service*, Centre for Policy Studies, London.
- D. P. Gray, M. Marinker and A. Maynard (1986), 'The doctor, the patient, and their contract, I-The general practitioner's contract: why change it?', *British Medical Journal*, 292, 1313-1315.
- D. Green (1986), *Challenge to the NHS: A Study of Competition in American Health Care and Lessons for Britain*, IEA, London.
- J. Greenberg et al. (1988), 'The social HMO demonstration: early experience', *Health Affairs*, Summer, 7, 66-79.

- R. Griffiths (Chair) (1988), *Community Care: Agenda For Action — A report to the Secretary of State for Social Services*, HMSO, London.
- Group Health Association of America, Inc., Research and Analysis Dept. (1989), *Vol I. Benefits, Premiums, and Market Structure in 1988*, Washington, D. C.
- C. Ham (ed.) (1987), *Health Care Variations: Assessing The Evidence*, Research Report No. 2, London, King's Fund Institute.
- J. T. Hart (1988), *A New Kind of Doctor*, Merlin, London.
- C. C. Havinghurst, R. B. Helms, C. Bladen and M. V. Pauly (1988), *American Health Care: What Are the Lessons For Britain?*, published by the IEA Health Unit, London.
- Health Care Financing Administration (HCFA) (1986), 'Competition in a changing health care environment', *Health Care Financing Review*, 1986 Supplement.
- F. Hellinger (1987), 'Selection bias in HMOs: analysis of recent evidence', *Health Care Financing Review*, Winter, 55-63.
- A. L. Hillman (1987), 'Financial incentives for physicians in HMOs', *New England Journal of Medicine*, 317(27), 1743-1848.
- A. L. Hillman, M. V. Pauly and J. J. Kerstein (1989), 'How do financial incentives affect physicians' clinical decisions and the financial performance of health maintenance organizations?', *New England Journal of Medicine*, 321(2), 86-92.
- J. Hughes (ed.) (1989), *The Future of Community Health Services*, King's Fund Centre (KFC 89/48), London.
- J. Iglehart (ed) (1988), 'The Managed Care Revolution', Special Issue, *Health Affairs*, (Summer).
- Institute of Medicine (IOM) (1984), *Community Oriented Primary Care*, (Vol. I & II), National Academy of Science Press, Washington.
- InterStudy (1989), *Quarterly Report of HMO Growth & Enrolment* InterStudy, Summer 1988, Excelsior, Minnesota.
- InterStudy-Center for Managed Care Research (1988), *From HMO Movement To Managed Care Industry: The Future of HMOs in a Volatile Healthcare Market*, Excelsior, Minnesota.
- B. Jarman (1983), 'Identification of underprivileged areas', *British Medical Journal*, 286, 1705-1709.
- B. Jarman (1984), 'Underprivileged areas: validation and distribution of scores', *British Medical Journal*, 289, 1587-1592.
- S. Kark (1981), *Community-Oriented Primary Care*, Appleton-Century-Crofts, New York.
- King's Fund Institute, Briefing Paper No. 9, *Managed Competition: A New Approach To Health Care in Britain*, London.
- Körner (Chair) (1982), *Steering Group on Health Services Information. First Report to the Secretary of State*, HMSO, London.
- P. R. Kongstred (1989), *The Managed Health Care Handbook*, Aspen Press, Rockville, Maryland.
- J. Kralewski, et al (1982), 'Patterns of Interorganizational Relationship Between Hospital and HMOs', *Inquiry*, 19, 357-366.
- P. A. Lembcke (1967), 'Evolution of the medical audit', *Journal of the American Medical Association*, 162, 646-655.
- D. F. Levinson (1987), 'Towards full disclosure of referral restrictions and financial incentive by prepaid health plans', *New England Journal of Medicine*, 317(27), 1729-1731.
- W. Leutz, et al (1985), *Changing Health Care for an Aging Society: Planning for the Social HMO*, Lexington, Massachusetts, Lexington Books.
- J. Lister (1989), 'Proposals for reform of the British national health service', *New England Journal of Medicine*, 320(13), 877-880.
- H. S. Luft (1981), *HMOs: Dimensions of Performance*, Wiley, New York.
- D. Mackie and D. Decker (1981), *Group and IPA HMOs*, Aspen Press, Rockville, Maryland.
- W. G. Manning, A. Leibowitz, G. A. Goldberg, W. H. Rogers and J. P. Newhouse (1984), 'A controlled trial of the effect of a prepaid group practice on use of services', *New England Journal of Medicine*, 310(23), 1505-1510.
- M. Marinker, D. P. Gray and A. Maynard (1986), 'The doctor, the patient, and their contract, II-A good practice allowance: is it feasible?', *British Medical Journal*, 292, 1374-1376.
- L. Marks (ed.) (1989), *Planning Primary Care: Forging Links Between FPCs and DHAs*, King's Fund Centre (KFC 89/14), London.
- L. Marks (1988), *Promoting Better Health? An Analysis of the Government's Programme for Primary Health Care*, Briefing Paper No. 7, King's Fund Institute, London.
- R. Maxwell (ed) (1988), *Reshaping the National Health Service*, Transaction Books, New Brunswick (USA) and Oxford (UK).
- A. Maynard, M. Marinker and D. P. Gray (1986), 'The doctor, the patient, and their contract, III-Alternative contracts: are they viable?', *British Medical Journal*, 292, 1438-1440.
- A. Maynard (1989), *NHS White Paper-Occasional Paper 1, Whither the National Service?*, University of York, Centre for Health Economics.
- N. Mays and G. Bevan (1987), *Resource Allocation in the Health Service*, London, Bedford Square Press.
- Medical Economics* (1989), 'How HMOs are changing the ways they pay you', June 19, 21-33.
- D. Metcalfe (1989), 'Betting The Company', in *THS Health Summary*, (March).
- S. Moore (1979), 'Cost containment through risk-sharing by primary-care physicians', *New England Journal of Medicine*, 300, 1359-1362.
- S. H. Moore, D. P. Martin and W. C. Richardson (1983), 'Does the primary-care gatekeeper control the costs of health care? Lessons from the SAFECO experience', *New England Journal of Medicine*, 309, 1400-1404.
- P. A. Nutting (ed.) (1986), *Community Oriented Primary Care: From Principals to Practice*, USDHHS, (HRS-A-P-E-86-1), US GPO, Washington.
- Office of Health Economics (1987), *Compendium of Health Statistics*, London.
- Promoting Better Health (1987), *The Government's Programme for Improving Primary Health Care*, HMSO, London.
- G. Rayner (1988), 'HMOs in the U. S. A. and Britain: a new prospect for health care', *Social Science and Medicine*, 27(4), 305-320.
- G. Rayner (1988), 'Should health maintenance organisations cross the Atlantic?', *Health Care UK 1988*, Policy Journals, Hermitage, Berks.
- M. Reagan (1987), 'Physicians as gatekeepers: a complex challenge', *New England Journal of Medicine*, 317(27), 1731-1734.
- Royal College of General Practitioners (1985), *What Sort of Doctor? Assessing Quality in General Practice*, July 1985, London.
- T. Richards (1986), 'HMOs: America today, Britain tomorrow?', Five Part Series, *British Medical Journal*, (292), 330-332, 392-394, 257-259, 460-463, 539-542.
- R. Scheffler (1989), 'Adverse selection: the Achilles heel of the NHS reforms', *The Lancet*, 29 April, 950-952.

- E. Smedley et al. (1989), *A Costing Analysis of General Practice Budgets*, Centre for Health Economics, University of York (in association with Derbyshire FPC), York.
- B. Spitz and J. Abramson (1987), 'Capitation and case management: barriers to strategic reforms', *The Milbank Quarterly*, 65(3), 348-370.
- D. Steinwachs, J. Weiner and S. Shapiro (1989), 'An Expanding Role for Management Information Systems in Quality Assurance', In: *Providing Quality Care: The Challenge to Clinicians*, American College of Physicians, Philadelphia.
- A. Stoline and J. Weiner (1988), *The New Medical Marketplace: A Physician's Guide to the Health Care Revolution*, The Johns Hopkins University Press, Baltimore and London.
- J. E. Ware Jr., R. H. Brook and W. H. Rogers et al (1986), 'Comparison of health outcomes at a health maintenance organisation with those of fee-for-service', *Lancet*, i, 1017-1022.
- J. Weiner (1986), 'Assuring quality of care in HMOs: past lessons, present challenges and future directions', *Journal of the Group Health Association of America*, 7, 10-27.
- J. Weiner, D. Steinwachs, and J. Williamson (1986-B), 'Nurse practitioner and physician assistant practices in three HMOs', *American Journal of Public Health*, 76, 507-511.
- J. Weiner (1987), 'Primary care delivery in the U. S. and four Northwest European countries: comparing the 'corporatized' with the 'socialized'', *Milbank Quarterly*, 65(3), 426-461.
- J. Weiner, B. Starfield, D. Steinwachs and L. Mumford (1989), *The Development of a Population Oriented Case-Mix Measure for Application to Ambulatory Care*, Johns Hopkins University, Health Services Research and Development Center, Baltimore.
- White paper (1989), *Working for Patients*, HMSO, London.
- G. R. Wilensky and L. F. Rossiter (1986), 'Patient self-selection in HMOs', *Health Affairs*, Spring.
- Working Paper 2 (1989), *Funding and Contracts for Hospital Services*, HMSO, London.
- Working Paper 3 (1989), *Practice Budgets for General Medical Practitioners*, HMSO, London.
- Working Paper 4 (1989), *Indicative Prescribing Budgets for General Medical Practitioners*, HMSO, London.
- Working Paper 6 (1989), *Medical Audit*, HMSO, London.
- Working Paper 8 (1989), *Implications for Family Practitioner Committees*, HMSO, London.

Appendix 1:

A glossary of terms related to US HMOs and managed care systems

Alternative Delivery System (ADS)

A generic term for new systems seen as alternatives to traditional fee-for service (FFS) indemnity health insurance plans. ADSs usually involve a significant degree of vertical integration (i.e. among providers offering different levels of care) and pre-determined contractual relationships between the ADS entity, the insurer (if separate) and the providers of care.

Case Management (CM)

Sometimes used interchangeably with managed care (see below) but usually meant as a type of care where a primary care physician (i.e. family practitioner, internist, paediatrician) manages the individual patient case by coordinating *all* services. The term of 'gatekeeper' is sometimes used to denote this approach. In some plans, no specialist or hospital care can be delivered without the case-manager's approval. A CM system is used by most HMOs, EPOs and HIOs. In HMOs, the case-manager is usually placed at financial risk for referral and hospital care, serving as a disincentive to 'open the gate'. In a few EPOs, PPOs, HIOs and IPAs, if the CM approach is a predominant characteristic of the organisation, the entity has been named for this feature (e.g. 'Primary Care Networks'). Another definition of 'case-manager' (usually a nurse or social worker) is that of medical ombudsman, whose job it is to coordinate the care process, especially as it relates to high cost or long-term care.

Competitive Medical Plans (CMP)

A term used by HCFA (the US government's Health Care Financing Administration) for a sub-set of the organisations that have risk sharing contracts to serve Medicare beneficiaries on a capitated payment basis (based on an adjusted average per capita cost, or AAPCC). These organisations are *not* considered HMOs (by HCFA) because they are not federally qualified (by HCFA's Office of Prepaid Health Care (OPHC)). In general, CMPs are conventional HMOs that do not have federal qualifications. This term is sometimes also used interchangeably with ADS.

Exclusive Provider Organisations (EPO)

A type of PPO (See PPO) where the patient must exclusively use the providers within the PPO. This characteristic is sometimes called a lock-in provision.

Gatekeeper

(see case-management)

Group Model HMO

A type of HMO (see HMO) where one large multi-specialty group practice is the sole (or major) source of care for an HMO's enrollees. The group may or may not have existed before the corporately distinct HMO entity formed, but it usually has an exclusive contract only with the one HMO. The Kaiser Permanente HMO is such a plan: Kaiser is the HMO, Permanente is the group.

Health Insuring Organisation (HIO)

A term developed by HCFA for special organisations that contract with a state's Medicaid Administration to provide care on a prepaid basis. HIOs (which are often local jurisdictions) do not directly provide care and must be legally separate entities from existing HMOs. Their structure is similar to an EPO. HIOs cannot exist exclusively to serve Medicaid enrollees. A new proposed Medicare programme would create a type of HIO option, known as the Private Health Plan Option — PHPO — where private retiree groups (known as Medicare Insured Groups, or MIGs), such as union-funds would receive a pre-determined capitation amount for a group of Medicare beneficiaries. The MIG would then, in turn, be responsible for purchasing the care for those enrolled.

Health Maintenance Organisation (HMO)

A prepaid organised delivery system where the organisation and at least the primary care physicians assume a financial risk for the care provided to its enrolled members. The HMO is legally committed to provide care to its enrollees, the members must obtain care from within the system if it is to be reimbursed. The term HMO was coined by Paul Ellwood for the Nixon Administration in 1972. This constituted a renaming of two existing delivery models; Pre-paid Group Practices (PPGPs) or closed-panel plans and IPAs (open-panel) plans. (The 'panel' refers to the panel of physicians available to the member). Today, there are four basic HMO models: staff; group; network; and IPA (see separate listings).

Independent, or Individual, Practice Association (IPA)

An open-panel type of HMO where individual physicians (or small group practices) contract with the HMO entity to provide care to enrolled members. The primary care doctors may be paid by capitation, or by FFS with a withhold risk-sharing provision. An IPA entity may or may not be legally distinct from the HMO entity with which the member enrolls. Most of the early IPAs were developed by organised medicine to compete with the large closed-panel HMOs. Many of these initial plans were sponsored by local medical societies and were known as Foundations for Medical Care (FMCs).

Managed Care

A term often used generically for all types of alternative delivery systems, implying that they manage the care received by consumers (in contrast to traditional FFS care which is unmanaged). More recently, this term has begun to denote the entire range of utilisation control tools that are applied to manage the practice of physicians and others regardless of the setting in which they practice. In addition to being used in all HMOs, and PPOs, these controls are increasingly being applied to conventional FFS indemnity plans (see Managed Indemnity Plan — MIP — below). The types of methods used to manage the patient's care may include: pre-admission certification, mandatory second-opinion before surgery, certification of treatment plans for discretionary non-emergent services (such as mental health care), primary care physician gatekeepers and non-physician case-manger/ombudsman to monitor the care process. The actual 'managing' organisation is often an entity separate from the payer or insurer (See TPA). The term managed care is sometimes used to denote a case manager programme (see above).

Managed Indemnity Plans (MIP)

A type of ADS where the insurer (or its agent) mandates a significant number of managed care (see above) controls for providers reimbursed through the otherwise conventional health insurance plan. Providers are paid on a FFS basis. A plan is usually not considered an MIP if it does not mandate certification before an enrollee can be admitted to hospital.

Mixed Model HMO

An HMO that is a mixture of the relatively distinct staff, group, network or IPA varieties. For example, an HMO that serves a significant proportion of its enrollees within a staff model site, but also contracts with several other groups or IPA entities, may be of this type. An HMO can be a mixed model when assessed within a particular market area or across areas. These types of HMOs are becoming more common, as HMOs of one model acquire or merge with previously separate HMOs of a different type. The results of such mergers are frequently known as network model HMOs (see network HMO listing for other definition).

MeSH (Medical Staff and Hospital)

A joint venture where a hospital (or hospitals) and its private practice medical staff (or other body of independent doctors) form a corporation. This MeSH entity, as a unit, may then contract to provide in-patient and/or ambulatory care to patients enrolled in an HMO or PPO (which is corporately distinct from the MeSH). The MeSH can also become a PPO or HMO by directly negotiating with employer groups or payers and by relating to outside providers on a contractual basis.

Network Model HMO

A type of HMO where a network of two or more existing group practices have contracted to care for the majority of patients enrolled in an HMO plan. A network model HMO sometimes also contracts with individual providers in a fashion similar to an IPA. Providers contracting with this type of HMO are usually free to serve those patients enrolled in other HMOs and PPOs. The term network/IPA is often used to encompass both this and the IPA model HMOs.

Open-Ended HMO

A type of HMO where the enrollees are not locked-in; they may leave the HMO and still have certain services covered. Such out-of-plan utilisation usually is subject to a significant degree of cost-sharing (e.g. deductibles) unlike those services delivered within the plan. Sometimes also called a point-of-service HMO because the plan loosely defines its boundaries at the point of service.

PPO (Preferred Provider Organisation)

A PPO is a common type of ADS where the PPO entity acts as the broker between the purchaser of care and the provider. In a PPO consumers may or may not choose to use preferred providers available within the plan. Consumers are, however, offered incentives to use such providers (usually decreased cost-sharing provisions and/or expanded benefits). In return for the patient referrals, providers agree that their care will be managed. Providers are usually paid a discounted FFS payment (e.g. 80% of their usual fee) and they do not participate in financial risk-sharing. (Also see EPO).

Single Benefit HMO

A type of entity that sub-contracts with other organisations (e.g. HMOs, indemnity insurers or EPOs) on a capitated basis to provide health services only within a single benefit category. Some SB/HMOs provide mental health, dental, or eye care only. The providers in these SB/HMOs may or may not participate in risk sharing arrangements.

Social HMO (S/HMO)

A type of HMO has been developed mainly on an experimental basis (with HCFA funding). It is intended to expand traditional HMO medical services to provide social support and long term care (LTC) to elderly and disabled enrollees. The S/HMO arrangement may revolve around a conventional HMO that contracts with a provider of LTC, a LTC organisation that contracts with medical providers, or an independent broker that contracts with all providers.

Staff Model HMO

A type of HMO where the majority of enrollees are cared for by physicians who are on the staff of the HMO. Although these physicians may be involved in risk-sharing arrangements, a majority of their income usually is derived from a fixed salary. The group cooperative consumer controlled HMOs are usually staff model plans. Because the physicians in these type of HMOs are also organised in groups, a label of group/staff model is used to encompass both this and the group model HMO.

Triple Option Plan (TOP)

A Mixed Model ADS (see above), or a collection of contractually linked ADSs (and/or insurers), that offer an employee the choice of three distinct health benefit options from within a single insurance-plan. TOPs offer an HMO, a PPO and a MIP (or a non-managed indemnity plan) under the same corporate umbrella. TOPs are often coordinated or owned by insurers who have formed or acquired free-standing ADSs to complement their traditional indemnity insurance. To an employer, one advantage of a TOP (vs. separate ADSs) is that biased selection, where healthier employees are skimmed by a given plan, can not take place.

Third Party Administrator (TPA)

A private firm that serves as a third party intermediary between the ADS/insurer (or a self-insured employer) and the provider. These firms are distinct from the ADS or insurer and are responsible for at least some (if not all) administrative functions. A TPA bears no financial risk associated with the insurance function. For example, for a PPO, a TPA may handle the claims payment process. For an MIP (or other ADS) a TPA may manage the care paid for by the insuring entity. A TPA performing this function is often known as a managed care company. TPAs are frequently used by self-insured employers to handle the entire claims payment process. Also, it is not uncommon for TPAs to operate PPOs or IPA-model HMOs. These lines of business are usually provided through sister corporations of the TPA.



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