King's Fund

National Evaluation of Total Purchasing Pilot Projects
Working Paper

# Survey of Budgetary and Risk Management of Total Purchasing Pilot Projects 1996/97

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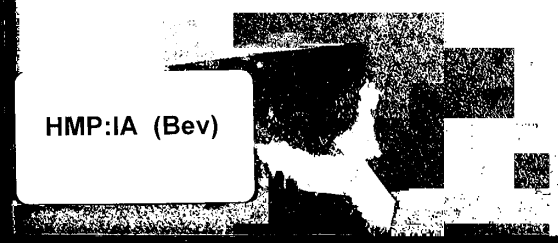

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Working Paper

# Survey of Budgetary and Risk Management

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**The Total Purchasing National Evaluation Team (TP-NET)**

The national evaluation of total purchasing pilots in England and Scotland is a collective effort by a large consortium of health services researchers. The study is led by the King's Fund, but also involves the National Primary Care R&D Centre; Universities of Edinburgh, Bristol, Southampton, York and Birmingham; the London School of Hygiene and Tropical Medicine; and the London School of Economics and Political Science. More information about the evaluation as a whole is available from: Nick Goodwin, King's Fund, 11-13 Cavendish Square, London W1M 0AN.

**Acknowledgements**

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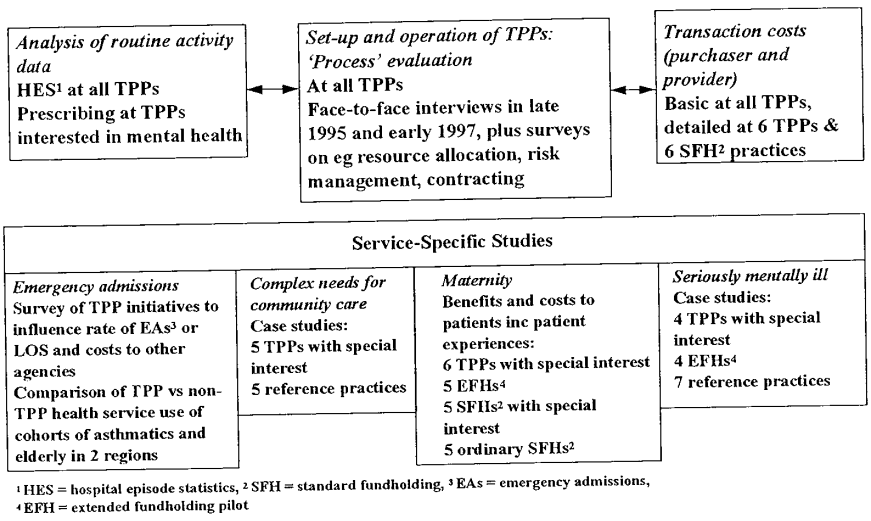
# Contents

## Preface: The National Evaluation of Total Purchasing Pilot Projects

Total Purchasing Pilot Projects allow for the purchasing of potentially all hospital and community health services by fundholding general practices which began their preparations for contracting in April 1995. Since 'total purchasing' (TP) represented an important extension of the already controversial fundholding scheme, the Department of Health decided to commission an assessment of the costs and benefits of this NHS Executive initiative. This working paper represents part of the interim reporting of the evaluation which began data collection in October 1995 (mid-way through the total purchasing pilots' (TPPs') preparatory year) and which is due to produce final reports in Autumn 1998, by which time the TPPs will have completed two full purchasing years. Other titles in this series of working papers are listed on page iii.

The evaluation amounts to a programme of inter-linked studies and is being undertaken by a large consortium of researchers from different universities led from the King's Fund. Full details of the participants are given on the back cover of this report. All 53 of the 'first wave' TPPs and the 35 'second wave' pilots which began a year later are being studied. The diagram below summarises the main elements of the research which has at its core an analysis of how TP was implemented at all projects and with what consequences, for example, in terms of hospital activity changes. These elements are linked to a series of studies at sub-samples of TPPs which attempt to compare the costs and benefits of TP with conventional health authority purchasing for specific services (emergency admissions, community care, maternity and mental health). In these parts of the evaluation, comparisons are also made between extended fundholding (EFH), where practices take on a new responsibility for purchasing in a single service area (e.g. maternity or mental health) and TP, where practices purchase more widely.

**Main components of National Evaluation of First Wave Total Purchasing Pilot Projects**




[1] HES = hospital episode statistics, [2] SFH = standard fundholding, [3] EAs = emergency admissions, [4] EFH = extended fundholding pilot

Further details about the evaluation design and methods are available in a leaflet available from the King's Fund and in the preliminary report of the evaluation which was published by the King's Fund early in 1997 and entitled *Total purchasing: a profile of national pilot projects*.

The evaluation would not have been possible without the co-operation and interest shown by all the staff involved in the TPPs. We are very grateful, principally for the time people have given up to be interviewed, whether in practices, health authorities, Trusts, social services departments or elsewhere in the health and social care system.

Nicholas Mays
Co-ordinator, Total Purchasing National Evaluation Team (TP-NET)
King's Fund, London
January 1998

# National Evaluation of Total Purchasing Pilot Projects
# Main Reports and Working Papers

| *Title and Authors* | *ISBN* |
|---|---|
| **Main Reports** | |
| Nicholas Mays, Nick Goodwin, Gwyn Bevan, Sally Wyke on behalf of the Total Purchasing National Evaluation Team (1997). *Total purchasing: a profile of the national pilot projects* | 1 85717 138 1 |
| Nicholas Mays, Nick Goodwin, Amanda Killoran, Gill Malbon on behalf of the Total Purchasing National Evaluation Team (1998). *Total purchasing: a step towards primary care groups* | 1 85717 187 X |
| **Working Papers** | |
| The interim report of the evaluation, *Total purchasing: a step towards primary care groups*, is supported by a series of more detailed Working Papers available during the first half of 1998, as follows: | |
| Nicholas Mays, Nick Goodwin, Gill Malbon, Brenda Leese, Ann Mahon, Sally Wyke<br>*What were the achievements of total purchasing pilots in their first year and how can they be explained?* | 1 85717 188 8 |
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| Ann Mahon, Brenda Leese, Kate Baxter, Nick Goodwin, Judith Scott<br>*Developing success criteria for total purchasing pilot projects* | 1 85717 191 8 |
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| Ann Mahon, Helen Stoddart, Brenda Leese, Kate Baxter<br>*How do total purchasing projects inform themselves for purchasing?* | 1 85717 197 7 |
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*National evaluation of general practice-based purchasing of maternity care: preliminary findings.*

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*Total purchasing and extended fundholding of mental health services*

Susan Myles, Sally Wyke, Jennie Popay, Judith Scott, Andrea Campbell, Jeff Girling — 1 85717 200 0
*Total purchasing and community and continuing care: lessons for future policy developments in the NHS*

Gill Malbon, Amanda Killoran, Nicholas Mays, Nick Goodwin — 1 85717 195 0
*A profile of second wave total purchasing pilots: lessons learned from the first wave*

## Summary

### Aims

To describe the experience and adequacy of budgetary and risk management arrangements of all first wave Total Purchasing Pilots (TPPs) in 1996/97.

### Methods

A postal questionnaire was sent to every TPP manager.

### Results

Forty five (92% of 49) eligible TPPs responded. Most TPPs holding a Total Purchasing (TP) allocation for 1996/97 were responsible for managing some budgets that were related to activity-dependant contracts. Twenty-eight (78% of 36 respondents) set budgets before contracts and these budgets were usually based on estimated past practice activity. Although information on activity and expenditure to date was circulated in most TPPs, only a third had agreed protocols for making modifications in spending if needed. Single practice TPPs were more likely to be able to vire funds between Standard Fundholding (SFH) and TP elements and less likely to have had overspends financed by the health authority. Three quarters of TPPs were able to maintain continued activity at the desired level throughout the year and only five (14% of 37) had to stop admitting non-urgent cases. Multi-practice TPPs were more likely to show variations in actual to planned spending and found it more difficult to manage expenditure within budgets.

Twenty eight TPPs (67% of 42) were worried that rare costly referrals might make them exceed their budget. Thirty (71% of 42) had examined at least one predictor of their risk due to rare costly referrals, but only eight (19% of 42) had examined risk caused by variation in referral rates using simulation methods. Risk was shared with health authorities in 30 (73% of 42) TPPs and was spread from year to year in 13 (31% of 42). TPPs with fewer than 20,000 patients were significantly more likely ($p=0.07$) than larger TPPs to spread risk from year to year. In three out four TPPs, GPs consulted someone else before deciding to make a rare costly referral - typically colleagues in the same practice or the health authority. During the 1996/97 financial year, four TPPs (14% of 35) reported problems because their expenditure on rare costly referrals had exceeded the provisions that had been made. Small TPPs (single practice or with small populations) were no more likely to experience problems than large TPPs (multi-practice TPPs and those with large populations). Ten TPPs (25% of 40) underspent their budgets for rare costly referrals, and 13 (33% of 40) did not know whether they had overspent or not. Only 15 TPPs (38% of 40) could specify how much they

had actually spent or had expected to spend on rare costly referrals during 1996/97.

**Conclusions**

TPPs have taken seriously the management of expenditure in activity-based contracts and kept this expenditure within budget. Multi-practice TPPs have found it more difficult to keep expenditure within budget than have single practice TPPs, and are more likely to be changing their budgetary management systems for 1997/98.

Most TPPs were worried about the financial risks caused by rare costly referrals. Most had made arrangements to manage these risks. More than one in ten reported problems due to overspending that were caused by inadequate financial provision. Large TPPs were no better at managing thses risks than small TPPs. More rigorous risk assessment and risk management strategies are needed and these require access to data on activity rates and prices.

# 1 Introduction

## Nature of total purchasing pilots

The UK National Health Service (NHS) is mainly funded by taxation and offers universal coverage to the population. The NHS reforms, introduced in 1991 (Secretaries of State for Health for England, Wales, Northern Ireland and Scotland, 1989), created a provider market by separating 'purchasers' from providers of secondary care (hospital and community health services). 'Purchasers' are in effect local insurers. They are funded for defined populations and contract with providers. The 1991 reforms created two kinds of local insurers: health authorities[1] and General Practitioners (GPs) who opted to become GP Fundholders (GPFHs). Populations of authorities are defined by administrative areas and those of GPFHs by patients who have chosen to register with GPs for primary care. GP fundholding began on a limited scale, with a small proportion of the population in GPFHs, and a restricted range of services[2]. GP fundholding grew considerably in the scale of population covered, and there was some extension in the range of services included (Audit Commission, 1996). The most dramatic extension was where GPFHs opted to become Total Purchasing Pilots (TPPs). The new Government's policy retains the purchaser / provider split, but creates, from 1999, one kind of local insurer only: a new 'primary care group' comprising all GPs in an area together with community nurses (Secretary of State for Health, 1997). In many ways, TPPs may be seen as a pilot of these primary care groups.

The first official announcement of Total Purchasing (TP) in October 1994 (NHS Executive, 1994) defined the concept as, 'where general practices in a locality purchase all hospital and community health services for their patients'. This announcement referred to four 'pioneer' sites. From April 1995, 53 new, first waveTPPs joined them in England and Scotland. This working paper is one of a series which reports on the evaluation by the Total Purchasing National Evaluation Team (TP-NET) of the first year of 'live' purchasing (April 1996 to March 1997) of these (originally) 53 TPPs. This paper specifically reports the findings from a questionnaire survey of the design and management of budgets and risk within TPPs. This includes how these TPPs managed their spending on contracts where payments to providers depended on the volume of patients treated, and on rare costly referrals for which contracts may not be agreed in advance – and may thus be regarded as Extra-Contractual Referrals (ECRs). This paper forms part of the 'component' of the evaluation which aims to explore the factors associated with the set-up and operation of TP (for further details of the evaluation see

[1] Note, for economy, in the rest of this paper, *authority* is taken also to apply to Health Boards in Scotland. In Northern Ireland there are Health and Social Services Boards.

[2] Prescribing and some staff costs in primary care; and outpatients, elective inpatients and diagnostic costs in hospital care.

TP-NET, 1997).

*A Profile of National Pilot TPPs* (TP-NET, 1996) made the important point that the term 'Total' Purchasing is a misleading description of TPPs. They did not, in their first year, purchase *all* hospital and community health services (HCHS) for their patients. They typically opted for a subset – hence *selective* purchasing would be a better description of these pilots. Within the scheme, a single general practice, or group of practices, is delegated a budget by the health authority to purchase a range of HCHS for their patients. These services would previously have been purchased by the authority and are not included in standard fundholding (SFH). The *Profile* also described how setting budgets for TPPs was the most difficult issue facing TPPs and their authorities. These problems, approaches taken to them, and a possible way forward have been described in another working paper entitled *Resource Allocation within Health Authorities* (Bevan, 1997).

Total Purchasing is a Pilot scheme with no statutory basis. A TPP's formal position is that of a subcommittee of its authority. The resources allocated to TPPs are, in effect, transferred from the authority's allocation (the resources that remain with the authority have to pay for purchasing not done by GPs). If a TPP were to overspend its budget on activity-related contracts, or on rare costly referrals, the authority would be responsible for financing such overspending.

**Importance and relevance of total purchasing pilots**

The objectives of the new Government's policy for the NHS are to remove competition, introduce long term contracts, abolish Extra-Contractual Referrals (ECRs), and in this way reduce transaction costs (Secretary of State for Health, 1997). The new 'primary care groups' will have a cash limited envelope for their populations' share of resources. The White Paper emphasises that these Groups will need adequate management arrangements and risk management plans for their budgets. They will thus have to work out how to keep their spend on both routine and rare costly admissions within their cash limits. Hence the issues explored in this paper are fundamental to their operation. They are also relevant to developing theory and practice on the organisation and finance of health services, and the findings may be important for other countries.

Arrow's seminal paper (Arrow, 1963), which may be seen as staking out the ground of the sub-discipline of health economics, emphasised three distinctive characteristics of health care with major implications for patients as 'consumers': uncertainty; possible high cost (in both

costs of medical care and health); and asymmetry of information. These characteristics explain why health care is typically organised through insurance (with governments being the dominant insurer in most countries), and a regulated medical profession. A consequence of insuring both consumers and suppliers from costs of services creates the problem known as 'moral hazard', in which the supplier has no incentive to be concerned about costs. We would expect these arrangements to produce what we observe, namely, that each year demand for health care increases (and far exceeds what is attributable to an 'ageing' population[3]). In the face of these increases insurers may respond in various ways.

A seemingly painless response is to attack 'moral hazard' on the supply side by introducing incentives for efficiency. Efficiency has been defined in terms of unit cost per inpatient admission for two significant reforms in the US and the UK. In the US, in the early 1980s, the Federal Government replaced the Medicare system of reimbursing hospitals for their 'reasonable costs' with the Prospective Payment System (PPS) by Diagnosis-Related Group (DRG) (Iglehart, 1983 and 1984). Under PPS by DRG, hospitals were paid a fixed rate according to the DRG to which each inpatient had been assigned (based on objective data such as diagnosis, procedure, age, complications and co-morbidities). Although this system creates incentives for hospitals to reduce costs per admission, it also means that they are paid extra if they admit more cases, or their case mix becomes more costly. In the UK, in the 1990s, the creation of the NHS provider market transformed authorities from being responsible for running services into insurers for their populations. In principle, authorities would make the NHS more efficient by choosing between competing providers, but authorities are in not in competition: their income is not at risk if they are ineffective purchasers. To remedy this lacuna in the internal market, purchasers were regulated through the efficiency index (Appleby, 1993; Clarke and McKee, 1992) which required them each year to reduce average costs per admission (with some crude adjustment for case mix based on specialties).

Whilst the search for efficiency will doubtless continue, it seems, if anything perversely to exacerbate the funding problem. In the US there is a fiscal crisis from funding escalating expenditure on Medicare (Aaron and Reischuaer, 1995; Iglehart, 1996). The UK avoids a fiscal crisis by setting prospective cash limits on expenditure, but this results in the NHS appearing to be chronically underfunded despite being allocated increases in expenditure each year. (It is interesting to note that a recent option argued for the reform of Medicare is that its total spend be controlled in this way by a budgetary cap (Marmor and Oberlander, 1998)).

[3] For example, in Wales in the 1980s, the estimated increase in admission rates for Wales attributable to changes in population was about 4%. The actual increase in admission rates was 44%. See Boyle and Harrison (1992). In England, for the ten years to 1993-94, the average annual increase in admission rates was about 2%, but the estimated year-on-year impact of population change was about half that. See Department of Health and Population Surveys (1995).

Hence, insurers are driven into responses which tackle 'moral hazard' on the demand side. The insurers' conventional response is to impose charges for patients at the point of consumption (for part or all the costs of care) (Arrow, 1963; Evans, 1987; Milgrom and Roberts, 1992). Although this conventional response is used extensively in the US, its efficacy is hotly contested (Evans, 1987). This is because of the asymmetry of information in health care: doctors not only supply care but are also dominant players on the demand side[4]. Thus insurers are exploring responses to tackle 'moral hazard' of doctors making decisions on demand for health care. US insurers have developed various ways of doing this through 'managed care', of which the family of Health Maintenance Organisations (HMOs) is particularly important (Starr, 1982; Reinhardt, 1997).

HMOs are funded by capitation; and one leading organisational form of HMO is where insurers have integrated into the demand side by employing primary care physicians who crucially act as gatekeepers to specialists (Weiner and Ferris, 1990). This is also seen as one way of controlling the costs of Medicare (Roper, 1988; Aaron and Reischuaer, 1995 and 1998). Enthoven's proposed reform of the NHS (Enthoven, 1985) recommended an internal market based on districts as HMOs: that is they employed GPs as gatekeepers to hospital services. The NHS reforms implemented in 1991 transformed authorities from being managers of hospitals into 'purchasers' of hospital services, but they are better described as insurers who practice 'unmanaged care'. Demand for hospital services is determined not by these 'purchasers', but by GPs and hospital doctors; neither of whom are employees of the authority. Indeed, GPs, in principle, are given clinical autonomy to refer patients to any hospital doctor. It is thus not surprising that authorities commonly face the recurrent problem towards the end of each financial year of Trusts 'overperforming' against contracts. That is, authorities are in the embarrassing position of Trusts having delivered volumes agreed in contracts at the start of the year, with some months remaining; GPs and hospital doctors continue to identify cases who need care, but authorities have no extra money to pay for these cases.

Given this background, TPPs and GPFHs appear to be a fascinating development in which GPs have opted to integrate their traditional roles (of providing primary care and acting as gatekeepers to specialist care) with the new role of insurer. Primary care groups look to be a logical development of these organisational innovations. One rationale for GPs opting to participate in rationing of access to health care is that they recognise that this has to be done,

[4] There is also, of course, the problem that for user charges to act as an effective deterrent they have to be significant. But, how can they be set for various levels of income so as to deter frivolous use of services but not result in delay in patients from seeking timely treatment?

and that they would rather do this themselves than have this done for their patients by others. Standard fundholding (SFH) was carefully designed to enable GPs to become insurers by being focused on their prescribing costs and their elective referrals. Over recent years, however, the most serious problems for authorities of 'overperformance' have been caused by explosive increases in emergency admissions (Round, 1997). Hence extending SFH into TP raises the question of whether TPPs are able, as one pioneer TP believed (Moore 1995), to influence emergency admissions and manage their expenditures better than health authorities.

What has become clear to us, however, in the research on which this paper is based, is that although SFHs and TPPs offer potential for GPs to also act as insurers, this potential is realised to varying degrees. We consider three important aspects of TPPs in this paper:

- Budgetary management;
- Risk management;
- Scale of insurer.

**Budgetary management**

We examine the extent to which GPs in TPPs and GPFHs actually integrate the roles of gatekeeper and insurer. Do *all* GPs get involved in budgetary management, or is it just the lead GP? We all know that there are two kinds of GPs: fundholders and non-fundholders. Our research has introduced to us an important third kind: non-fundholding GPs in fundholding practices[5]. In initial interviews of TPPs, some practices said that as SFHs they contacted the hospital when funds ran out and asked for admission for patient's treatment to be deferred. Hence, these practices were behaving in the same way as a health authority. Even if all GPs are involved, there is a further question of whether they have information in time to avoid year-end spending crises. Relying on invoices is inadequate – indeed, this problem of expenditure committed but not reported was a common cause of US HMOs going bankrupt (Weiner and Ferris, 1990). Hence, for TPPs to be able to manage spend throughout the year, they ought to keep track of referrals and not just rely on invoices.

We have examined effectiveness in managing budgets in terms of four criteria:

- maintaining expenditure as planned;
- ease of controlling expenditure;

[5] This third type may be caricatured as GPs who are happy to accept the benefits of fundholding for their patients -- e.g. practice based services -- provided that fundholding in no way interferes with their clinical autonomy.

- designing flexibility to cope with changes in actual as compared with planned spend; and
- the extent to which GPs are satisfied with their clinical freedom to make decisions within the budgetary arrangements.

**Risk management**

We examine the size of insurer required for the management of risk. US commentators, drawing on the experience of HMOs, argued that populations of at least 50 000 are necessary to avoid bankruptcy due to random variation in costs (Scheffler, 1989; Weiner and Ferris, 1990). Indeed Scheffler suggested that financial risk is the 'Achilles heel' of the single practice as an insurer. This suggests that multi-practice TPPs will be the *only* ones able to manage risk. Even if that were a necessary condition, it is not, of course, sufficient. If multi-practice TPPs do not make a proper assessment of this risk, or their arrangements are haphazard, then they may or may not be better placed than single practice TPPs. Without a proper assessment of risk and adequate financial provision, TPPs are playing roulette with health authority money. If they have 'bad luck' with a few costly patients, they have to rely on the authority to bail them out; and if they have 'good luck' they may hope to keep their savings (rather than keep these as a risk reserve). Even if adequate financial provision has been made, there is the problem of whether these arrangements re-introduce the problem of 'moral hazard', which is supposed to be one justification for this new organisational form. This problem will arise if risk arrangements insulate GPs as purchasers from responsibility for the consequences of their decisions. Such arrangements ought to be confined only to referrals over which GPs have relatively little discretion (for example, forensic psychiatry). If these arrangements also apply where GPs have discretion, they ought to be designed to include the TPP being liable for part of the costs. There are two ways in which this might be organised. A fixed sum (known as a deductible) is common in car insurance, the principle being that there ought to be incentives for individuals to be careful, but that if an accident happens, the individual has no influence over the cost. The more common arrangement in health insurance, however, is to require individuals to pay a proportion of the cost (known as a co-payment), the principle being that individuals will be aware that their different choices are likely to result in different costs (Milgrom and Roberts, 1992).

Our survey of the management of risk aimed to describe:

- the concerns of TPP managers about financial risks due to rare costly referrals;
- what risk management arrangements they had made;
- how financial considerations influenced their referral decisions; and

- how TPPs actually performed with regard to over- and under-spends.

**Scale of insurer**

The third set of questions explores trade-offs between large and single-practice TPPs for organising insurance around GPs. One of the main aims of the evaluation as a whole is to determine the best model of TPP. In terms of managing spend, we would expect GPs in a single practice TPP to be more likely to accept peer review and reach agreements over how to manage their spending than GPs from a large number of practices (because GPs in a single practice are in a working partnership). In terms of managing risk from rare costly referrals, however, the advantage lies with multi-practice TPP as this offers a larger risk pool. But this again raises the question of whether GPs from different practices are able to work together in resolving the tensions of integrating their roles as GPs and insurers. We have sought to find out whether budgets and risk are managed most effectively when organised around a single practice or in multi-practice TPPs. We have also investigated how budgetary management relates to organisational complexity[6] and different designs of TPPs' budgets.

[6] The organisational complexity of TPPs is explained in detail elsewhere (TP-NET 1997). This measure distinguishes between the levels of formal structural arrangements which TPPs have in place. For example, a 'complex' organisation will have a range of management boards (authority, TPP and Executive) in place plus a number of formal sub-groups and external participation; 'simple' organisations usually have a joint TPP/Executive Board and no formal sub-groups or external involvement. 'Intermediate' organisations lie part way between the above examples.

## 2 Methods

In July 1997 all TPPs were sent a questionnaire that included sections on budgetary and risk management in the first 'live' year of purchasing (1996/97). Questionnaires were sent to TPP/fund managers. Some multi-practice TPPs were known to work as a grouping of independent practice level units. However, given that one of the aims of this survey was to determine the extent to which TPPs worked as a single unit, a single representative from each TPP was sent a questionnaire. Questionnaires were addressed to TPP/fund managers; the answer to questions relating to GP opinion should, therefore, be viewed with some caution.

A small number of questions on budgetary and risk management were included in initial face to face interviews with GPs and fund managers in 1995/96. The responses were used to inform the questionnaire. The questionnaire was piloted over the telephone with one single and one multi-practice TPP. These pilots resulted in some minor clarifications. The questionnaire was posted to the remaining 47 TPPs (for the two TPPs who had acted as pilots, data were used from the telephone interviews). A written reminder was sent after one month and a telephone reminder two to three weeks later. The telephone reminder offered respondents a choice of returning the questionnaire by post or completing it over the telephone at a pre-arranged time.

The section of the questionnaire on budgetary management was grouped into five sections:

- how did the practices manage their SFH budgets pre-TP;
- what is the design of TP budgets and why was this design chosen;
- was the plan maintained;
- what made it work/not work; and
- was the system perceived as being effective?

Questions on the methods used to control demand for care and therefore expenditure as a SFH were asked for one practice only in each TPP. No attempt was made to elicit answers for all practices as SFH in many cases was entirely separate from TP. If the TPP manager who completed the questionnaire was not based in a practice or had no knowledge of SFH arrangements, someone else completed this section. The risk management part of the questionnaire defined rare costly referrals as 'those types of hospital referral that are uncommon, costly, not covered by contracts with hospitals and for which the TPP has to pay (i.e. they are not blocked back to the authority)'. Managers were asked:

- whether they were worried about rare costly referrals,
- how they had assessed and managed risk,
- how costs may have influenced general practitioners' decision-making about referrals,
- whether they had had problems due to overspending, or whether they had underspent.

Responses were compared between single and multiple practice TPPs, between TPPs with up to 20,000 patients and larger TPPs (for risk management only) and between TPPs at the three levels of organisational complexity (see above for details of how this was done). Differences in percentages between these categories of TPPs were tested statistically with Pearson's $\chi^2$ or Fisher's exact test, or Cuzick's nonparametric test for trend, as appropriate. We report differences in the body of the text where these were statistically significant (using the conventional level of 5%). We report in footnotes the level of significance and also where differences were not statistically significant.

All sites that reported a financial crisis or difficulty at the end of the year, or problems because of inadequate provision for rare costly referrals, were telephoned so as to identify the nature of the crises or problems.

# 3 Results

## Questionnaires returned

Four of the original 53 TPPs had withdrawn from TP. Questionnaires were returned by 45 of the remaining 49 TPPs (92%): 32 of 35 (91%) multi-practice TPPs; and 13 of 14 (93%) single practice TPPs. Twenty-four TPPs responded to the first mailing, nine to the second, and twelve completed the questionnaire after a reminder telephone call. Missing data for individual questions give a range of denominators; results are therefore reported with percentages and total number of responses for each question.

## Managing budgets as standard fundholders

For SFH, all practices claimed that they had tried to manage expenditure to ensure continued activity throughout the financial year. However, two in three (29 of 44, 66%) thought that they may be heading for an overspend at some stage and one in three (15 of 44, 34%) had to restrict admissions to urgent cases only, leaving routine cases until the next financial year.

Table 1 shows the methods used to try to control SFH expenditure. Almost all practices (43 of 44, 98%) ensured that GPs were aware of the financial position of the practice. This was normally done by providing information on expenditure against budgets and on referral levels (42 of 44, 96%). Other methods used were providing details on budgets at the same time in the previous year, of case mix changes, monitoring prescribing lists and making available referral costs by individual GP. Nearly two in three practices (29 of 44, 66%) controlled expenditure through peer pressure on referrals. Nearly one in five practices (9 of 44, 20%) imposed referral ceilings. Other means included imposing financial ceilings; encouraging use of preferred providers; auditing the outcome of referrals; and using in-house waiting lists or slowing the release of referrals.

**Table 1: Methods of controlling expenditure as standard fundholders (%)**

| | Yes (n=44) | % |
|---|---|---|
| Were GPs aware of the financial position? | 43 | 97.7 |
| Was this by... | | |
| i) receiving information on expenditure against budgets? | 42 | 95.5 |
| ii) receiving information on referral levels? | 37 | 84.1 |
| iii) other? | 12 | 27.3 |
| Were referrals controlled by... | | |
| i) peer pressure to reduce expenditure? | 29 | 65.9 |
| ii) imposition of referral ceilings? | 9 | 20.5 |
| iii) other? | 22 | 50.0 |

**Size and proportion, and number of budgets managed by TPPs**

The mean and median sizes in 1996/97, of TP budget were £8.5m and £5.9m (the largest budget was £30m). For that part tied to activity-dependent contracts, the mean and median sizes were £3.9m and £2.9m (46% and 49% of the total). (Activity-dependent contracts are those for which the TPP was responsible for managing activity as compared with simple block contracts where the Trust has to manage activity within an agreed fixed annual payment.) Table 2 gives percentages of total TP budget per TPP spent on activity-dependent contracts. More than two in three (26 of 37, 70%) were spending more than 40% of their budgets on activity-dependent contracts. Nearly one in five (7 of 37, 19%) were not spending any of their budget in this way[7].

Eight TPPs did not hold a 'live' budget and, therefore, did not complete the remainder of the budgetary management section of the questionnaire.

TPPs typically managed fewer than four budgets: the modal number was one budget for both single and multi-practice TPPs; the median numbers of budgets were four for single practice TPPs and three for multi-practice TPPs. About half the TPPs held a separate budget for each contract (51%), half placed more than one contract within a budget (49%). Two in three multi-practice TPPs (67%) placed more than one contract within a single budget compared with one in ten single practice TPPs (9%)[8].

[7] There was no difference in these percentages for single and multi-practice TPPs, or in terms of organisational complexity.

[8] p=0.001.

**Table 2: Percent of the total TP budget spent on activity-dependent contracts**

| | Number | % |
|---|---|---|
| None | 7 | 18.9 |
| Up to 20% | 3 | 8.1 |
| Between 20% & 40% | 1 | 2.7 |
| Between 40% & 60% | 10 | 27.0 |
| Between 60% & 80% | 6 | 16.2 |
| Over 80% | 10 | 27.0 |
| Total | 37 | 100 |

**Design of budgets**

Four in five multi-practice TPPs (19 of 24, 79%) acted as a single unit for TP; that is, they set their budgets for the TPP as a whole. The other TPPs set budgets for individual practices which then acted autonomously. SFH allocations, however, were pooled in only one in eight TPPs (3 of 23, 13%). Although TPPs are formally required to account for SFH and TP budgets separately, separate management of these budgets is not universal practice: one in ten of single and multi-practice TPPs (10% and 11%) managed their SFH and TP as one budget.

Table 3 shows the various methods used to set budgets. TPPs often used more than one method. Three in four TPPs (26 of 36, 72%) divided the total TP allocation into separate budgets for service areas before negotiating contracts within these budgetary limits. Two TPPs set budgets and contracts simultaneously. Four in five TPPs based budgets on estimated past activity by the practice(s) multiplied by price and nearly one in two (12 out of 27, 44%) on estimated past practice spend. Other methods included weighted capitation of authority spend and trends in countywide activity[9].

No single practice and only one in three of the multi-practice TPPs (8 of 24, 33%) accounted for expenditure at the time of referral. Three in four TPPs (23 of 32, 72%) accounted for expenditure when the invoice was received from the hospital. One TPP accounted both at the time of referral and when the invoice was received.

[9] There was no difference in either the type or organisational complexity of the TPPs in the methods used to set budgets.

**Table 3: Number (%) of projects using the following information to set budget levels***

| | Yes | % |
|---|---|---|
| Budgets set before contracts | 28/36** | 77.8 |
| - on estimated past spend by practice(s) | 12/27 | 44.4 |
| - on estimated past activity by practice(s) | 22/27 | 81.5 |
| - on % of past HA spend | 9/27 | 33.3 |
| - on % current HA spend | 6/27 | 22.2 |
| - other method | 10/27 | 37.0 |

* more than one answer possible
**including two which set budgets and contracts simultaneously

Table 4 shows the level at which monitoring took place. All TPPs monitored spend against budgets for all contracts, except for two TPPs, which monitored only a selected number of contracts. Four in five multi-practice TPPs (20 out of 24, 83%) had protocols for sharing information on activity and financial performance between practices. One in three TPPs monitored individual GP referral rates (11 of 37, 30%), with similar proportions in single and multi-practice TPPs. One in three TPPs (10 of 34, 29%) had agreed protocols for making appropriate modifications in referral rates if needed[10].

**Table 4: Monitoring of activity data**

| | All projects | | Distribution of 'Yes' | |
|---|---|---|---|---|
| | Yes | % | Single | Multi |
| Were individual GP referral rates monitored? | 11/37 | 29.7 | 3 | 8 |
| Agreed protocol for sharing information on activity & financial data between GPs? | 30/35 | 85.7 | 8 | 22 |
| Were individual practice referral rates monitored? | 16/25 | 64.0 | NA | 16 |
| Agreed protocol for sharing information on activity & financial data between practices? | 20/24 | 83.3 | NA | 20 |
| Agreed protocol for making appropriate modifications? | 10/34 | 29.4 | 5 | 5 |

Table 5 shows the extent to which GPs were involved in budgetary management. In about

[10] Although this was, however, more common in single practice TPPs (5 of 9, 56%) than in multi-practice TPPs (5 of 25, 20%), this difference was not statistically significant (p=0.08).

half the TPPs, lead GPs were the only GPs in receipt of monitoring information and, therefore, involved in decisions on how to adjust expenditure if necessary. (This compares with over 95% receiving such information for SFH.) Less than one in three single practice TPPs involved only the lead GP compared with about one in two multi-practice TPPs[11].

About half the TPPs (18 of 32, 56%) used methods similar to those used in SFH to control demand, (e.g. peer pressure, or giving activity or financial information to GPs). Some TPPs found the question difficult to answer because they saw TP activity as being less amenable to GP control than SFH activity. Many TPPs, however, had introduced innovations to control TP expenditure[12].

**Table 5: GPs receiving monitoring information**

| | Lead GP only | Some but not all GPs | All GPs | Total |
|---|---|---|---|---|
| Information on expenditure to date | 17 | 7 | 13 | 37 |
| Review/discuss expenditure against budgets | 20 | 10 | 6 | 36 |
| Review/discuss expected annual spend | 17 | 8 | 11 | 36 |
| Decide upon actions to adjust expenditure | 14 | 10 | 11 | 35 |

Table 6 gives details of how TPPs designed flexibility into budgets. Less than half (9 of 22, 41%) of multi-practice TPPs had arrangements in place to vire funds between practices. Of those which had such arrangements, more than half used them (5 of 9, 55%)[13]. Nearly half the TPPs (15 of 34, 44%) had arrangements in place to vire funds between TPP and the health authority. There was no difference between the proportions of single and multi-practice TPPs having these arrangements. But the way these arrangements worked showed that no single practice TPP used the authority to finance TPP overspend, but one single practice TPP financed overspend by its authority. Multi-practice TPPs often used the authority to finance TPP overspends (84.6%), but this difference was not statistically significant (p=0.057). Of the

[11] p=0.006

[12] These included: monitoring of 'at risk' patients by the primary health care team; introduction of early discharge schemes; introduction of non-hospital emergency care; practice based protocols for elective TP demand, contract penalties for providers; change of referral destination to a provider with an 'under-performing' contract; collaboration between GPs with acute trusts on clinical practice; control of SFH spend to ensure that TP was not required to subsidise SFH in single practice TPPs.

[13] Nine in ten single practice TPPs (8 of 9, 89%) and one in two multi-practice TPPs (13 of 25, 52%) had facilities to vire money between the SFH and TP budgets, but this difference was not statistically significant (p=0.1).

four multi-practice TPPs which did not have their overspend financed by the authority, three had authority overspends financed by the TPP. One multi-practice TPP vired funds between HCHS and General Medical Services (GMS)[14].

**Table 6: Flexibility of budgets**

| | All projects | | Distribution of 'Yes' | |
|---|---|---|---|---|
| | Yes | % | Single | Multi |
| Between practices? | 9/22 | 40.9 | NA | 9 |
| - was this facility used? | 5/9 | 55.6 | NA | 5 |
| Between the SFH and TP elements of the fund? | 21/34 | 61.8 | 8 | 13 |
| - was this facility used? | 13/24 | 54.2 | 5 | 8 |
| - did TP finance SFH overspends? | 10/22 | 45.5 | 4 | 6 |
| - did SFH finance TP overspends? | 2/21 | 9.5 | 1 | 1 |
| Between the health authority and the project? | 15/34 | 44.1 | 3 | 12 |
| - was this facility used? | 12/20 | 60.0 | 1 | 11 |
| - did the HA finance project overspends? | 11/15 | 73.3 | 0 | 11 |
| - did project finance HA overspends? | 4/16 | 25.0 | 1 | 3 |

**Achievement of budgetary aims and methods used**

Table 7 reports on success in achieving planned spending. Three in four TPPs (28 of 37, 76%) were able to maintain activity at desired rates throughout the year. There were no differences between single and multi-practice TPPs on this criterion. Across all TPPs, nearly one in three (11 of 36, 31%) experienced a financial difficulty or crisis at the year-end[15]. One in seven TPPs (5 of 37, 13.5%) had to stop admitting non-urgent cases as TPPs. (This compares with one in three as SFHs, see above). Only one TPP made a large unplanned saving.

[14] Although no details were given, this may have been through traditional secondary care services being provided by GPs with payment from the TP fund.

[15] Although this was more common for multi-practice TPPs (10 of 25, 40%) than for single practice TPPs (1 of 11, 9%), this difference was not statistically significant (p=0.11).

**Table 7: Success in achieving planned spending**

| | All projects | | | Distribution of 'Yes' | |
|---|---|---|---|---|---|
| | Yes | Total | % | Single | Multi |
| Did the project maintain continued activity at the desired level throughout the year? | 28 | 37 | 75.7 | 7 | 21 |
| Did all practices maintain continued activity at the desired level throughout the year? | 19 | 24 | 79.2 | NA | 19 |
| Was there a large unplanned saving? | 1 | 37 | 2.7 | 0 | 1 |
| Was there any kind of financial difficulty/crisis? | 11 | 36 | 30.6 | 1 | 10 |
| Did you stop admitting non-urgent patients? | 5 | 37 | 13.5 | 1 | 4 |

Table 8 reports methods used to control spending. This shows that two in three TPPs (26 of 37, 70%) found variation at some time between actual and planned spend. This occurred in nine out of ten multi-practice TPPs (23 of 26, 88.5%), but in less than one in three single practice TPPs (3 of 11, 27.3%)[16]. TPPs with more complex organisations were also more likely to show variations in actual to planned spend[17], but these are typically multi-practice TPPs. Nearly one in two TPPs moved funds between budgets and this proportion was similar for single practice (5 of 11, 45%) and multi-practice TPPs (11 of 26, 42%). One in three TPPs (11 of 35, 31%) were planning to change their budgetary system for 1997/98. No single practice TPP is changing its system, but nearly one in two multi-practice TPPs are (11 of 26, 42%)[18].

[16] $p<0.001$

[17] $p=0.001$.

[18] $p=0.007$. Although more 'intermediate' and 'complex' organisations than 'simple' organisations appear to be altering the system for 1997/98, this was not statistically significant.

**Table 8: Methods used to control spending**

| | All projects | | Distribution of 'Yes' | | Organisational Complexity | | |
|---|---|---|---|---|---|---|---|
| | Yes | % | Single n=11 | Multi n=26 | 'Complex' n=13 | 'Inter-mediate' n=13 | 'Simple' n=11 |
| Was there any variation in actual to planned spend? | 26/37 | 70.3 | 3 | 23 | 11 | 12 | 3 |
| Did you take corrective action? | 15/29 | 51.7 | 1 | 14 | 8 | 5 | 2 |
| Were funds moved between budgets? | 16/35 | 45.7 | 5 | 11 | 5 | 8 | 3 |
| Were funds moved between practices? | 7/23 | 30.4 | NA | 7 | 4 | 3 | 0 |
| Has the system changed for 1997/8? | 11/35 | 31.4 | 0 | 11 | 5 | 5 | 1 |

**Perceived effectiveness and ease of controlling demand**

Table 9 gives results of managers' satisfaction with monitoring and adaptation of demand. This shows that across all TPPs half (16 of 32, 50%) were satisfied with the ways in which GP performance was monitored and one in three (12 of 34, 35%) with how this was adapted. More single practice TPPs (6 of 10, 60%) were satisfied with the adaptation of GP performance than multi-practice TPPs (6 of 24, 25%)[19]. In multi-practice TPPs, nearly 70% (17 of 25) were satisfied with the way in which they monitored the performance of individual practices, but less than 30% with the way practices adapted their performance.

[19] p=0.026

**Table 9: Adapting and monitoring of performance**

| | All projects | | Distribution of 'Yes' | |
|---|---|---|---|---|
| | Yes | % | Single | Multi |
| Performance of GPs satisfactorily monitored? | 16/32 | 50.0 | 5 | 11 |
| Performance of GPs satisfactorily adapted?* | 12/34 | 35.3 | 6 | 6 |
| Performance of practices satisfactorily monitored? | 17/25 | 68.0 | NA | 17 |
| Performance of practices satisfactorily adapted?** | 7/24 | 29.2 | NA | 7 |

*11 (32.4%) projects considered this unnecessary
**9 (37.5%) projects considered this unnecessary

Table 10 reports the perceived effectiveness and ease of controlling demand as reported by managers. A rating of one means it was very important for GPs to have freedom to refer throughout the year, or very easy for GPs to maintain continued activity and to adapt GP performance. A rating of five means it was not at all important for GPs to have freedom to refer throughout the year, or very difficult for GPs to maintain continued activity and to adapt GP performance. Sixty percent (6 of 10) of single practice and 15% (4 of 26) of multi-practice TPPs saw freedom of GPs to refer throughout the year without constraints as very important[20]. No single practice TPPs reported GPs as experiencing any difficulty in maintaining continued activity, but multi-practice TPPs reported difficulties for more than one in four (7 of 26, 27%). No TPP found it very easy to adapt performance by GPs or practices or both. No single practice TPP found this very difficult, but nearly one in four multi-practice TPPs found adapting performance very difficult[21].

[20] p=0.02.
[21] p=0.004

**Table 10: Perceived effectiveness and ease of controlling demand**

| | | Scale (1-5) | | | | |
|---|---|---|---|---|---|---|
| | | (1) important/ easy | (2) | (3) | (4) | (5) not important /difficult |
| Importance to GPs of freedom to refer throughout year without constraints? | Single (n=10) | 6 | 1 | 1 | 2 | 0 |
| | Multi (n=26) | 4 | 10 | 10 | 1 | 1 |
| How easy do GPs think it was to maintain continued activity? | Single (n=10) | 3 | 2 | 5 | 0 | 0 |
| | Multi (n=26) | 4 | 8 | 7 | 5 | 2 |
| How easy was it to adapt GP/practice performance? | Single (n=10) | 0 | 4 | 4 | 1 | 0 |
| | Multi (n=26) | 0 | 2 | 3 | 14 | 6 |

Table 11 reports managers' satisfaction with the financial management system and degree of clinical freedom rated on a scale from one to three. A rating of one means 'too complicated/bureaucratic', of two means 'about right', and of three means 'not sophisticated enough/too flexible'. The majority thought their systems and degree of clinical freedom were 'about right'. The main source of dissatisfaction was that a third did not think that the financial management system was sophisticated enough. There were no differences in these ratings between single and multi-practice TPPs or in terms of organisational complexity.

Nearly 90% of TPPs (31 of 35, 89%) claimed that all GPs were satisfied with their own clinical freedom (not shown). The four TPPs where not all GPs were satisfied with their clinical freedom were multi-practice TPPs. Over 90% of multi-practice TPPs (23 of 25, 92%) were satisfied with the amount of clinical discretion each individual practice was allowed.

TPPs that experienced a financial crisis were more likely to change their system[22]. Of the 11 TPPs changing the system for 1997/98, six (55%) experienced a financial crisis. Twenty-three TPPs were not changing the system for 1997/98, although four (17%) did experience some form of financial crisis. Whether TPPs experienced a financial crisis was neither related to the sophistication of their system of financial management nor the proportion of their total budget tied to activity-dependent contracts. It appears that the TPPs that experienced a financial crisis or changed the budgetary management system for 1997/98 were those in which GP performance was not satisfactorily adapted within year and which found it was difficult to do so[23].

**Table 11: Satisfaction with financial management system and degree of clinical freedom**

| | Too complicated /bureaucratic | About right | Not sophisticated /too flexible |
|---|---|---|---|
| System of financial management (n=35) | 4 (11.4%) | 20 (57.1%) | 11 (31.4%) |
| Clinical freedom within the system (n=35) | 3 (8.6%) | 29 (82.9%) | 3 (8.6%) |

## Risk assessment

Table 12 reports on methods used for risk assessment. Two in three TPPs were worried that rare costly referrals might make them exceed their budgets (28 of 42, 67%) with little difference between single practice and multi-practice TPPs, and between small and large TPPs (less than and greater than 20 000 population). About 60% of all TPPs made some attempt to assess the financial risk posed (25 of 42, 59%), and examined their own TPP's previous referral rates (27 of 42, 64%) and hospital prices (25 of 42, 57%). One in two of all TPPs (21 of 42, 50%) calculated the expected cost of rare costly referrals (by multiplying the number of referrals expected by the price of each referral)[24]. Only one in five TPPs (8 in 42, 19%) examined the risk caused by variation in referral rates using computer simulation methods. There was no difference in this by TPP type.

[22] $p=0.04$

[23] $p<0.04$ in all cases.

[24] Higher proportions of small and single practice TPPs used each of the methods of risk assessment. None of these differences were statistically significant due to small numbers. The TPPs that were least likely to have assessed risk were those with intermediate organisational complexity.

**Table 12. Risk assessment methods used (%)**

| | Total (n=42) | Single practice (n=13) | Multiple practices (n=29) | ≤20,000 patients (n=11) | >20,000 patients (n=31) |
|---|---|---|---|---|---|
| Are you worried that rare costly referrals might make you exceed your budget? | 67 | 62 | 69 | 73 | 65 |
| Have you assessed the financial risk posed to your project by rare costly referrals? | 59 | 69 | 55 | 74 | 55 |
| Did you ever... | | | | | |
| Look at previous referral rates for your practice, or practices in your project? | 64 | 77 | 57 | 82 | 58 |
| Look at previous referral rates for practices in your district? | 36 | 38 | 34 | 45 | 32 |
| Look at hospital prices for rare costly referrals? | 57 | 77 | 48 | 82 | 48 |
| Calculate the expected cost of rare costly referrals (that is, multiply the number of referrals expected by the price of each referral)? | 50 | 54 | 48 | 55 | 48 |
| Undertake computer simulation to explore the expected cost of rare costly referrals? | 19 | 31 | 14 | 55 | 23 |

Table 13 reports the types of rare costly referrals that worried TPP managers and shows that most were worried about psychiatric referrals and intensive care admissions.

**Table 13. Types of rare costly referrals that worry TPPs**

| | Number of projects (25 responses) |
|---|---|
| Mental health (including eating disorders, forensic, long-stay, specialist inpatient) | 16 |
| Intensive care (including ITU, SCBU, NICU, PICU) | 11 |
| Transplants | 5 |
| Haematology, leukaemia | 4 |
| Renal services | 4 |
| Accident and emergency emergency admissions | 3 |
| Cardiothoracic or cardiology procedures | 3 |
| Spinal injuries and operations | 2 |
| Rehabilitation | 2 |
| Cancer, including chemotherapy | 2 |
| Hyperbaric treatment | 1 |
| Cochlear implant | 1 |
| Burns | 1 |
| Paediatric surgery | 1 |
| In vitro fertilisation | 1 |

**Risk management strategies**

Table 14 reports the risk management strategies used and shows that three in four TPPs (31 of 42, 73%) shared risk with their health authorities and spread risk from year to year[25]. Other methods mentioned in response to the open-ended question included monitoring referrals and costs, peer review of referrals, and keeping unallocated funds as a contingency fund.

One in three TPPs (11 of 33, 33%) had contributory arrangements with their 'insurance fund': for example, one TPP paid 18% (co-payment) and three TPPs the first £15,000, £20,000 or £50,000 (deductibles)[26]. Contributory arrangements were more often required of TPPs with

[25] One in two single practice TPPs (7 of 13, 54%) and TPPs with less than 20 000 patients (6 of 11, 55%) spread risk from year to year within their TPP. This compares with about one in five of multi-practice (6 of 29, 21%) and larger TPPs (7 of 31, 23%). These differences are not, however, statistically significant (p=0.07 for both).

[26] Only one in six single practice TPPs (2 of 13, 15%) used contributory arrangements compared with nearly one in two multi-practice TPPs (9 in 20, 45%), but this difference is not statistically significant (p=0.13).

intermediate organisational complexity (6 of 10, 60%) than other TPPs (5 of 23, 22%)[27]. One in ten TPPs (4 of 40, 10%) reported changing their premiums for their 'insurance funds' in 19979/8[28].

**Table 14. Risk management methods used during 1996/97 (%)**

| | Total (n=42) | Single practice (n=13) | Multiple practices (n=29) | ≤20000 patients (n=11) | >20 000 patients (n=31) |
|---|---|---|---|---|---|
| Shared risk with health authority | 73 | 69 | 75 | 64 | 77 |
| Spread risk from year-to-year within the project | 31 | 54 | 21 | 55 | 23 |
| Shared risk with more than one health authority | 8 | 8 | 8 | 18 | 4 |
| Other methods | 33 | 64 | 68 | 36 | 32 |

**Impact on referral decision-making**

Table 15 gives details on whom, if anyone, the patient's GP typically consulted before making a decision on a rare costly referral. In three out of four TPPs (32 of 42, 76%), GPs consulted someone else before making such a referral. In those TPPs where GPs did consult, nearly three in four consulted other GPs in the practice (23 of 32, 72%) and two in three consulted the health authority (21 of 32, 66%). GPs were significantly more likely to make the decision without consulting anyone in TPPs with more than 20 GPs (7 of 16, 44%) than in TPPs with fewer than 20 GPs (3 of 26, 12%)[29].

[27] p=0.05.

[28] There was no difference between large and small TPPs in the proportion making this change.

[29] p=0.03.

**Table 15. Who decides about whether to make an extra-contractual rare costly referral?**

| | Number | % |
|---|---|---|
| The patient's GP in consultation with other GPs in the practice. | 23/42 | 55 |
| The patient's GP in consultation with the health authority. | 21/42 | 50 |
| The patient's GP in consultation with GPs from other practices in the project ** | 12/29 | 41 |
| The patient's GP alone. | 10/42 | 24 |
| Other | 2/42 | 5 |

* more than one answer possible
** multi-practice projects only

### Dealing with an overspend or underspend

Table 16 reports methods of avoiding overspending on rare costly referrals. Only one in seven TPPs (5 of 37, 14%) reported problems arising because the cost of rare costly referrals exceeded the provision made for them[30]. TPPs reported that various options were used to avoid an overspend: more than one in five (8 of 35, 23%) chose a less costly option for managing patients; one in six refused to allow a referral (6 of 35, 17%); and one in seven (6 of 35, 14%) asked the authority to help.

One in four TPPs (10 of 40, 25%) underspent their budget for rare costly referrals during 1996/97. One in three TPPs (13 of 40, 33%) did not know whether they had underspent their rare costly referral budget. Nearly one in two single practice TPPs (6 of 13, 46%) underspent their budget compared with one in seven multi-practice TPPs (4 of 27, 15%)[31]. One in two small TPPs (with less than 20,000 population), underspent their budget (6 of 11, 55%) compared with one in seven larger TPPs (4 of 29, 14%)[32]. Of the ten TPPs reporting savings, four held the savings over to the next year in case of an overspend the next year, six spent the savings on something else, and one returned the savings to the health authority.

Judgement on the adequacy of risk management is limited by a lack of detailed financial information. Only 15 TPPs were able to estimate what they had spent in 1996/97 on rare costly referrals over and above contributions to risk sharing schemes, only 14 could state what

[30] There was no difference in this proportion between single or multiple practice TPPs, or between larger or smaller TPPs or for differences in organisational complexity.
[31] p=0.05.
[32] p= 0.01.

they had expected to spend during this period, and only 10 provided both estimates. Of the last, the median actual spend on rare costly referrals was 80% of expected (range 50% to 440%). Expressed as a percentage of the national average combined TP and SFH budgets, the median actual spend on rare costly referrals was 0.7% (range 0.3% to 3.6%; n=14), and the median expected spend was 0.9% (range 0.3% to 2.8%; n=12). Thus there is no indication that TPPs tended systematically to over- or underestimate their spending during the year.

In the case of the largest spend relative to expectation, a TPP with a 23,000 population and a combined TP and SFH budget of £6.7m spent 3.3% of its combined budget, whereas it had expected only to spend 0.7%. This TPP, however, reported that it did not run into problems due to costs of rare costly referrals exceeding the provisions made. Problems were reported by a TPP with a 43,000 population whose actual spend on rare costly referrals was 3.6% of the combined budget, and was 55% higher than expected. Another TPP, with population of 36,000, spent 206% of what it expected on rare costly referrals, and reported consequent problems. None of the other three TPPs reporting problems stated what had actually been spent on rare costly referrals.

**Table 16. Methods of avoiding overspend on rare costly referrals**

| | Number | % |
|---|---|---|
| During 1996/7, did your project face problems because the costs of rare costly referrals exceeded the provision which had been made? | 5/37 | 14 |
| Did you defer any referrals to next financial year? | 2/35 | 6 |
| Did you choose a less costly option for managing patients? | 8/35 | 23 |
| Did you refuse to allow costly referrals? | 6/35 | 17 |
| Did you ask the health authority to help financially? | 6/35 | 17 |
| Did you use any other method to avoid an overspend? | 9/35 | 25 |
| At the end of the 1996/97 financial year, did you find that you had underspent your budget for rare costly referrals? | 10/40 | 25% |

Table 17 reports findings from the telephone survey to identify the nature of the crises or problems for all sites that reported a financial crisis or difficulty at the end of the year, or problems because of an inadequate budget for rare costly referrals. Of the five that reported problems, four had overspent their budget. The fifth had anticipated an overspend due to two cases but this had not occurred. Using results reported elsewhere (Bachmann and Bevan, 1996) we estimate that insurance premiums to cover 15 categories of rare costly referral - which include all of the cases that caused problems - should be about £12 per capita (about

3% of the total HCHS budget). In comparison, all of the budgets for rare costly referrals for these TPPs (see Table 17) were too low, and some severely inadequate. Table 17 shows that problems were experienced for a wide range of population sizes and per capita budgets. The specific problems experienced by the four TPPs were in each case due to between one and three exceptionally costly patients.

**Table 17. Costly cases that led expenditure on rare costly referrals to exceed the provisions made**

| Population (000s) | Rare costly Referral budget (£'000s) | Budget per capita £ | Costly cases | Cost per case (£'000s) | Total RCR cost* (£'000s) |
|---|---|---|---|---|---|
| 43 | 412 | 9.58 | Cardiac surgery<br>PICU<br>Long stay | 60<br>40<br>100 | 650 |
| 36 | 100 | 2.78 | Psychiatric secure<br>Psychiatric secure | 100<br>100 | 200 |
| 33 | 29 | 0.89 | Intensive care | 89 | 89 |
| 13 | 100 | 7.69 | Eating disorder<br>Intensive care | 80<br>30 | 110 |

* this includes other rare costly referrals.

# 4 Discussion

This discussion consists of six sections.

The first section on *budgetary management of standard fundholding* aims to describe what practices have in common and what the main differences are in managing their SFH budget,.

The following four sections discuss how TPPs managed their budgets for contracts and rare costly referrals (which were essentially ECRs). The contents and objectives of each section are as follows:

- *Typical TPPs*: this aims to describe the typical TPP (where we found no systematic differences between single and multi-practice TPPs).

- *Differences between TPPs*: this aims to describe the main differences between TPPs (where again we found no systematic differences between single and multi-practice TPPs).

- *Multi-practice TPPs*: these findings apply to these TPPs only.

- *Differences between single and multi-practice TPPs*: this aims to describe the main differences attributable to whether TPPs are single or multi-practice.

A final section considers trade-offs between large and single-practice TPPs for organising insurance around GPs and *implications for the new primary care groups* (Secretary of State, 1997).

**Budgetary management of standard fundholding**

The main finding here is that in the TPPs, the practices as SFHs had made significant steps in integrating GPs' traditional role as gatekeeper with that of insurer. Practices tried to manage SFH expenditure to ensure continued activity throughout the financial year. They provided all GPs with information on expenditure against budgets and on referral levels. Nearly two in three practices controlled expenditure through peer pressure on referrals and one in five imposed referral ceilings. Two in three practices reported that at some stage they thought that they may be heading for an overspend. Of these practices, one in three had had to restrict admissions to urgent cases only, leaving routine cases until the next financial year. This also shows that integration of GPs' role as gatekeeper with that of insurer was neither universal nor

complete. Thus when under budgetary pressure, one in three SFHs responded similarly to health authorities.

**Findings of typical TPPs (common to single and multi-practice TPPs)**

In the typical TPP, about half the total TP budget was in activity-based contracts and there were fewer than four budgets. Budgets were based on estimated past activity multiplied by price, and contracts were then negotiated. Protocols were developed for sharing information on activity and financial performance between GPs and practices (in multi-practice TPPs). TPPs monitored spend by contract against budgets, when the invoice was received from the hospital. This weakened the capacity of TPPs to integrate their roles of insurer and gatekeeper: by the time it was clear that the TPP was heading for an overspend it was likely to be too late to do anything about it. In 1996/97, however, the typical TPP was able to maintain activity at desired rates throughout the year. This is a surprising contrast with difficulties experienced for SFH. Fund managers reported that systems and degree of clinical freedom were 'about right' and that all GPs were satisfied with their clinical freedom. This again suggests that TPP had a limited impact in terms of integrating GPs' roles of insurer and gatekeeper.

TPPs were worried that rare costly referrals might make them exceed their budgets, in particular, for psychiatric referrals and intensive care admissions. They made some attempt to assess the financial risk posed by examining their own TPP's previous referral rates and hospital prices. They shared risk with their health authorities. Before making a referral GPs consulted other GPs in the practice and the authority.

**Differences between TPPs (common to single and multi-practice TPPs)**

Each of the following characteristics applied to one in two TPPs:

- having a separate budget for each contract;
- using methods similar to those used in SFH to control demand;
- moving funds between budgets;
- calculating the expected cost of rare costly referrals;
- having arrangements in place to vire funds between TPP and authority.

Each of the following characteristics applied to one in three TPPs:

- monitoring individual GP referral rates;
- experiencing a financial difficulty or crisis at the year-end;
- thinking that the financial management system was not sophisticated enough;
- having contributory arrangements with their insurance fund;
- not knowing whether they had underspent their rare costly referral budget.

It is interesting to see that the normal pattern of contributory arrangements adopted was that of car insurance rather than health insurance, the underlying rationale of which is that GPs have influence over whether someone is referred, but not the costs of the referral.

Each of the following characteristics applied to a minority of TPPs. One in four TPPs, or fewer:

- had to stop admitting non-urgent TP cases;
- changed their premiums for their insurance funds in 1997/98;
- had problems because the cost of rare costly referrals exceeded the provision made for them;
- examined the risk caused by variation in referral rates using computer simulation methods;
- underspent their budget for rare costly referrals during 1996/7.

Only one TPP had made a large unplanned saving.

There are three main findings to emerge from analysing differences between TPPs. First, only a minority attempted serious integration of GPs' roles of insurer and gatekeeper. For SFH, most practices had developed ways of controlling demand and monitoring individual GP referral rates. Practices varied in carrying these across to TPP. Second, there was no evidence of a systematic difference between small and large TPPs in their ability in the first year of TP to manage spend on rare costly referrals within a budget. Third, arrangements for TPPs that did overspend this budget were inadequate. Other TPPs had also made inadequate arrangements but had been lucky. It is worrying that, of TPPs reporting savings, only a minority carried savings forward in case of an overspend the next year.

**Results for multi-practice TPPs only**

The typical multi-practice TPP:

- acted as a single unit for TP;
- did not have arrangements in place to vire funds between practices;
- was satisfied with the way if monitored the performance of individual practices and satisfied with the amount of clinical discretion each individual practice was allowed;
- was dissatisfied with the way practices adapted their performance;
- did not manage SFH and TP as one budget;
- did not pool SFH allocations.

**Where single and multi-practice TPPs were different (significant differences)**

Single practice TPPs looked to have gone further in integrating the roles of gatekeeper and insurer of *all* GPs. In these TPPs, it was more likely:

- for not only the lead GP but others to receive monitoring information and be involved in decisions on how to adjust expenditure if necessary;
- that there were agreed protocols for making appropriate modifications in referral rates if needed to keep spend within budget;
- for GPs to consult one another before making a rare costly referral.

It is thus not surprising that in single practice TPPs, it was more likely that:

- actual spend followed planned spend;
- the budgetary system was not changed;
- GPs were able to adapt their behaviour and were satisfied with how this was done.

The strength of single practice TPPs as organisations was, however, offset by one potential weakness in obtaining information. No single practice and only one in three of the multi-practice TPPs accounted for expenditure at the time of referral.

## Implications for the new primary care groups (PCGs)

There are two main findings on the trade-offs between large and single-practice TPPs for organising insurance around GPs. First, as expected, single practice TPPs were more effective at managing expenditure against budgets. They tended to make more progress in integrating GPs into the role of insurer. Second, which is surprising, multi-practice TPPs were no better at managing risk than single practice TPPs. This reflects the inadequacy of their initial provision for rare costly referrals.

The new primary care groups (PCGs) will need to have adequate management arrangements and risk management plans for their budgets for both routine and rare costly admissions. It is suggested that their size will be about 100,000 which is consistently larger than the TPPs studied here. Despite this, the current study provides two insights for PCGs.

Firstly, size alone is no guarantee that these groups will be able to manage rare costly admissions. This problem will, in part, be addressed by the White Paper's proposal to organise purchasing at three levels: Regional Office, health authority, and primary care group; the rarer the admission the larger the purchaser. But this cannot solve the problem examined here: simply pushing all rare referrals outside the responsibility of the primary care group, merely recreates the problem of moral hazard. The management of risk requires very careful design.

Secondly, our study shows that budgets based on single practices are better managed than those for multi practice organisations. It makes sense then to set the *external cash limits* of primary care groups (with accountable officers) at populations larger than single practice (i.e. 100,000). However, it seems advantageous to set *internal budgets* either at practice level within the primary care groups, or for small groups of practices which are willing to work together in taking on the responsibilities of managing the level of spending on their patients.

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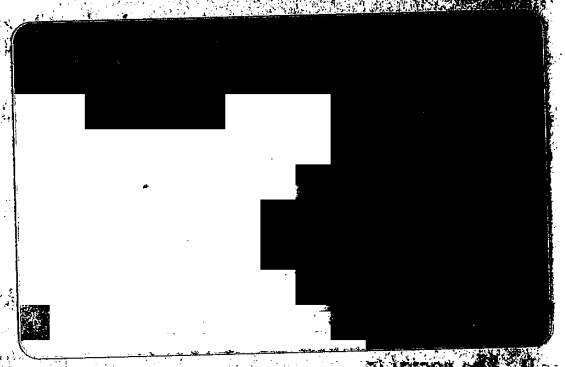

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